

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

----- In The Matter Of -----

PUBLIC UTILITIES COMMISSION

Instituting a Proceeding to  
Investigate Implementing a  
Decoupling Mechanism for Hawaiian  
Electric Company, Inc.,  
Hawaii Electric Light Company,  
Inc. and  
Maui Electric Company, Limited

---

DOCKET NO. 2008-0274

PUBLIC UTILITIES  
COMMISSION

2010 MAR 23 P 3:48

FILED

PROPOSED FINAL DECISION AND ORDER

March 23, 2010

The Honorable Chairman and Members of the  
Hawaii Public Utilities Commission  
465 South King Street, Room 103  
Honolulu, Hawaii 96813

PUBLIC UTILITIES  
COMMISSION

2010 MAR 23 P 3:48

FILED

Dear Commissioners:

Re: Docket No. 2008-0274 – Decoupling Proceeding  
Proposed Final Decision and Order

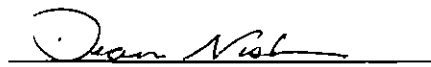
In accordance with the Commission's *Order*, filed February 19, 2010 in the instant proceeding ("Order"), Hawaiian Electric Company, Inc. ("Hawaiian Electric"), Hawaii Electric Light Company, Inc. ("HELCO"), Maui Electric Company, Limited ("MECO"),<sup>1</sup> and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate") respectfully submit the attached Proposed Final Decision and Order for the Commission's use in the decoupling proceeding, Docket No. 2008-0274.

In the Order, the Commission: (1) approved the *Joint Final Statement of Position of the HECO Companies and Consumer Advocate*, filed May 11, 2009, as amended by filings on June 25, 2009 and July 13, 2009, and as subsequently modified by the proposals in the Hawaiian Electric Companies' *Motion for Interim Approval of a Decoupling Mechanism*, filed November 25, 2009, to the extent agreed-upon by the Hawaiian Electric Companies and the Consumer Advocate, as indicated in the present record, subject to the Commission's issuance of a final decision and order in this matter; and (2) instructed the Hawaiian Electric Companies and the Consumer Advocate to file a Proposed Final Decision and Order, consistent with the Order, as soon as practicable, but no later than 30 days from the date of the Order, for the Commission's review and approval.<sup>2</sup> See Order at 1-2.

Very truly yours,



Darcy L. Endo-Omoto  
Vice President  
Hawaiian Electric Company, Inc.  
Hawaii Electric Light Company, Inc.  
Maui Electric Company, Limited



Dean Nishina  
Executive Director  
Division of Consumer Advocacy  
Department of Commerce and  
Consumer Affairs

Attachment

cc: Service List

<sup>1</sup> Hawaiian Electric, HELCO and MECO are collectively referred to as the "Hawaiian Electric Companies."

<sup>2</sup> Thirty days from February 19, 2010 is March 21, 2010. Pursuant to Section 6-61-21 of the Hawaii Administrative Rules, *Rules of Practice and Procedure before the Public Utilities Commission*, two days are added to the prescribed period since the Commission served the Order by mail. Therefore, the due date is March 23, 2010, and the Hawaiian Electric Companies and the Consumer Advocate have timely filed the Proposed Final Decision and Order.

SERVICE LIST  
Docket No. 2008-0274

KENT T. MORIHARA, ESQ. (by e-mail)  
KRIS N. NAKAGAWA, ESQ.  
RHONDA L. CHING, ESQ.  
Mori-hara Lau & Fong LLP  
841 Bishop Street, Suite 400  
Honolulu, Hawaii 96813  
(kmorihara@mori-haragroup.com)

Attorneys for Kauai Island Utility Cooperative

WARREN S. BOLLMEIER II (by e-mail)  
President  
Hawaii Renewable Energy Alliance  
46-040 Konane Place 3816  
Kaneohe, Hawaii 96744  
(wsb@lava.net)

CARL FREEDMAN (by e-mail)  
Haiku Design & Analysis  
4234 Hana Highway  
Haiku, Hawaii 96708  
(jcfr@hawaiiantel.net)

GERALD A. SUMIDA, ESQ. (by e-mail)  
TIM LUI-KWAN, ESQ.  
NATHAN C. SMITH, ESQ.  
Carlsmith Ball LLP  
ASB Tower, Suite 2200  
1001 Bishop Street  
Honolulu, Hawaii 96813  
(gsumida@carlsmith.com)  
(tlui-kwan@carlsmith.com)  
(nnelson@carlsmith.com)

Attorneys for Hawaii Holdings, LLC,  
dba First Wind Hawaii

SERVICE LIST  
Docket No. 2008-0274

MIKE GRESHAM (by e-mail)  
Hawaii Holdings, LLC, dba First Wind Hawaii  
33 Lono Avenue, Suite 380  
Kahului, Hawaii 96732  
(mgresham@hawaii.rr.com)

DEBORAH DAY EMERSON, ESQ. (by e-mail)  
GREGG J. KINKLEY, ESQ.  
Deputy Attorney General  
Department of the Attorney General  
State of Hawaii  
425 Queen Street  
Honolulu, Hawaii 96813  
(gregg.j.kinkley@hawaii.gov)  
(eseese@dbedt.hawaii.gov)

Attorneys for the Department of Business,  
Economic Development, and Tourism

MARK DUDA (by e-mail)  
President  
Hawaii Solar Energy Association  
P. O. Box 37070  
Honolulu, Hawaii 96837  
(mark@DEPhawaii.com)

DOUGLAS A. CODIGA, ESQ. (by e-mail)  
Schlack Ito Lockwood Piper & Elkind  
Topa Financial Center  
745 Fort Street Mall, Suite 1500  
Honolulu, Hawaii 96813  
(dcodiga@sil-law.com)

Attorney for Blue Planet Foundation

## TABLE OF CONTENTS

I.	PROCEDURAL BACKGROUND.....	3
A.	Initiation of the Docket.....	3
B.	Intervention.....	5
C.	Procedural Order.....	6
D.	Decoupling Proposals.....	9
E.	Panel Hearing.....	10
II.	DISCUSSION.....	14
A.	Amended Joint Proposal Summary.....	14
B.	Issues.....	15
1.	Whether Decoupling Will Help Achieve Hawaii's Objectives.....	16
a.	Hawaii's Objectives.....	16
b.	Overview of Decoupling.....	20
c.	Parties' Positions.....	25
d.	Findings.....	29
2.	Ability of Sales Decoupling to Achieve Hawaii's Objectives.....	30
a.	Sales Decoupling and RBA Details.....	33
b.	Positions of the Parties.....	44
c.	Findings.....	47
3.	Ability of the RAM to Achieve Hawaii's Objectives.....	50
a.	RAM Details.....	50
b.	Positions of the Parties.....	67
c.	Findings.....	76
4.	Ability of RAM Alternatives to Achieve Hawaii Objectives.....	78
a.	Revenue Per Customer and Other Alternatives.....	79
b.	RAM Variants.....	87
c.	Findings.....	91
5.	ECAC Amendment.....	93
a.	ECAC Amendment Details.....	96
b.	NRRI Alternative.....	99
c.	Parties' Positions.....	102
d.	Findings.....	107
6.	Decoupling Review Process and Safeguards.....	111
a.	HCEI Performance Metrics.....	112
b.	Earnings Sharing Revenue Credit Mechanism.....	127
c.	Credit Mechanism for Major and Baseline Capital Projects.....	130
d.	Service Quality Metric.....	133
e.	On-Going Review of Decoupling.....	139
III.	ULTIMATE FINDINGS OF FACT AND CONCLUSIONS OF LAW.....	147
IV.	ORDERS.....	148

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

----- In The Matter Of -----	)	
	)	
PUBLIC UTILITIES COMMISSION	)	DOCKET NO. 2008-0274
	)	
Instituting a Proceeding to	)	
Investigate Implementing a	)	
Decoupling Mechanism for Hawaiian	)	
Electric Company, Inc.,	)	
Hawaii Electric Light Company,	)	
Inc. and	)	
Maui Electric Company, Limited	)	
	)	
	)	

---

**PROPOSED FINAL DECISION AND ORDER**

By this Proposed Final Decision and Order, the commission approves the Joint Final Statement of Position of the HECO Companies and Consumer Advocate,<sup>1</sup> filed on May 11, 2009 ("Joint FSOP"), as amended by filings on June 25, 2009,<sup>2</sup> and July

---

<sup>1</sup>The "HECO Companies" collectively refers to Hawaiian Electric Company, Inc. ("HECO"), Hawaii Electric Light Company, Inc. ("HELCO"), and Maui Electric Company, Limited ("MECO"); the "Consumer Advocate" refers to the Department of Commerce and Consumer Affairs, Division of Consumer Advocacy. The remaining parties to this proceeding are: the Department of Business, Economic Development, and Tourism ("DBEDT"), Haiku Design and Analysis ("HDA"), Hawaii Renewable Energy Alliance ("HREA"), Hawaii Solar Energy Association ("HSEA"), and Blue Planet Foundation ("Blue Planet"). In addition, Hawaii Holdings, LLC dba First Wind Hawaii ("First Wind") is a participant in this docket. The HECO Companies, Consumer Advocate, DBEDT, HDA, HREA, HSEA, and Blue Planet are collectively referred to as the "Parties."

<sup>2</sup>See HECO's Revised and New Exhibits for the Joint FSOP, filed June 25, 2009 ("June 25, 2009 Exhibits").

13, 2009,<sup>3</sup> and as subsequently modified by the proposals in the HECO Companies' Motion for Interim Approval of a Decoupling Mechanism, filed on November 25, 2009 ("Interim Motion"), to the extent agreed-upon by the HECO Companies and the Consumer Advocate, as indicated in the present docket record ("Amended Joint Proposal"). In accordance with the commission's Order, filed February 19, 2010 in this docket ("Order") and as described in the Amended Joint Proposal, HECO's revenues shall be decoupled from sales as of the date of the Order, February 19, 2010. The tracking of target revenue and recorded adjusted revenue by HECO commenced on February 20, 2010, in order to align with the effective date of the tariff that implemented the commission's Second Interim Decision and Order, filed February 19, 2010 in HECO's 2009 test year rate case, Docket No. 2008-0083 ("Second Interim D&O"). Paired decoupling tariffs for each of the HECO Companies in the form of a Revenue Balancing Account ("RBA") and Revenue Adjustment Mechanism ("RAM") have been prepared and filed with the commission for approval, as described herein. Attached Exhibits 1 through 6 substantively represent the HECO Companies' decoupling tariffs.<sup>4</sup>

---

<sup>3</sup>See HECO's responses to Questions from Panel Hearings Held on June 29 to July 1, 2009, filed July 13, 2009 ("July 13, 2009 Responses").

<sup>4</sup>HECO's RBA tariff provision ("RBA Provision") and RAM tariff provision ("RAM Provision") are attached hereto as Exhibits 1 and 2,

I.

PROCEDURAL BACKGROUND

A.

Initiation of the Docket

By Order Initiating Investigation, filed on October 24, 2008 ("Opening Order"), the commission opened this docket to examine implementing a decoupling mechanism for the HECO Companies that would modify the traditional model of ratemaking

---

respectively. MECO's RBA Provision and RAM Provision are attached hereto as Exhibits 3 and 4, respectively. HELCO's RBA Provision and RAM Provision are attached hereto as Exhibits 5 and 6, respectively. To the extent that the provisions therein are identical, Exhibits 1, 3 and 5 hereto are sometimes collectively referred to as the "RBA Provision", and Exhibits 2, 4 and 6 hereto are sometimes collectively referred to as the "RAM Provision".

The most recent prior jointly agreed-upon submission by the HECO Companies and Consumer Advocate of a RBA tariff provision was filed as Exhibit "A" to the Joint FSOP. As further discussed in Section II.B.2.a of this Decision and Order, the RBA Provision contains a subsequent modification to recover target revenue through a single RBA account for both residential and nonresidential customers (instead of two separate accounts as reflected in the Joint FSOP), as proposed originally on pages 92-94 of the Opening Brief of Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited, filed September 8, 2009 ("HECO Opening Brief"), in the HECO Companies' Interim Motion, and as agreed upon by the Consumer Advocate. This modification is "highlighted" in Exhibits 1, 3 and 5 hereto.

The most recent prior jointly agreed-upon submission by the HECO Companies and Consumer Advocate of a RAM tariff provision was filed in this docket as Attachment 7 to the July 13, 2009 Responses. As further discussed in Sections II.B.3.a and II.B.6.c of this Decision and Order, the RAM Provision contains a subsequent addition to provide for the refund of certain disallowed costs for baseline capital projects, as proposed originally on pages 97-98 of the HECO Opening Brief, in the HECO Companies' Interim Motion, and as agreed upon by the Consumer Advocate. This modification is "highlighted" in Exhibits 2, 4 and 6 hereto.

for the HECO Companies by separating the HECO Companies' revenues and profits from electricity sales. In the Opening Order, the commission acknowledged that:

On October 20, 2008, the Governor of the State of Hawaii, the State of Hawaii Department of Business, Economic Development and Tourism, the State of Hawaii Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate"), and the HECO Companies entered into a comprehensive agreement designed to move the State away from its dependence on imported fossil fuels for electricity and ground transportation, and toward "indigenously produced renewable energy and an ethic of energy efficiency." A product of the Hawaii Clean Energy Initiative, the Agreement is a commitment on the part of the State and the HECO Companies to accelerate the addition of new, clean resources on all islands; to transition the HECO Companies away from a model that encourages increased electricity usage; and to provide measures to assist consumers in reducing their electricity bills.

Included in the Agreement is a commitment by the HECO Companies to modify their traditional rate-making model by implementing a decoupling mechanism. Generally, decoupling is a regulatory tool designed to separate a utility's revenue from changes in energy sales. Decoupling, as asserted by its proponents, has the benefits of encouraging the substitution of renewable resources, distributed generation and energy efficiency for the utility's fossil fuels production (by reducing a utility's disincentive to promote these types of resources and programs), while simultaneously protecting a utility's financial health from erosion as these types of programs go into effect.<sup>5</sup>

---

<sup>5</sup>Opening Order at 1-3 (footnote omitted). The Agreement refers to the Energy Agreement Among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and the Hawaiian Electric Companies ("Energy Agreement"). It arose

In the Opening Order, the commission: (1) named the HECO Companies and the Consumer Advocate as parties to this proceeding; (2) directed them to file a joint proposal on decoupling within 60 days of the date of the order; and (3) directed them (and any intervenors and participants) to file a stipulated (or proposed) procedural schedule and a stipulated (or proposed) protective order within 45 days of the date of the order.

B.

#### Intervention

Motions to intervene were filed by (1) DBEDT, (2) HDA, (3) HREA, (4) HSEA, (5) Blue Planet, (6) First Wind and (7) Life of the Land ("LOL"). The motions to intervene were approved by an order issued by the commission on December 3, 2008, which order also: (1) denied a motion by Tawhiri Power LLC for an enlargement of time to file a motion to intervene;<sup>6</sup> (2) dismissed as moot motions for leave to file reply memoranda that were

---

from the Memorandum of Understanding between the State of Hawaii and the U.S. Department of Energy to establish a partnership, called the Hawaii Clean Energy Initiative ("HCEI"), which aims to have 70% of all of Hawaii's energy needs generated by renewable energy sources by 2030. The signatories to the Energy Agreement are the Governor of the State of Hawaii, DBEDT, the HECO Companies and the Consumer Advocate. See Opening Order at 2 n.2.

<sup>6</sup>On January 9, 2009, the commission issued an order denying a motion filed by Tawhiri Power LLC on December 15, 2008 for reconsideration of the order denying Tawhiri Power LLC's motion for enlargement of time.

filed by LOL, HDA, Blue Planet, and HREA on November 24, 2008, November 25, 2008, November 26, 2008 and December 1, 2008; and (3) extended certain deadlines that were addressed in the Opening Order. Thereafter, during the course of the docket, LOL withdrew from the proceeding and First Wind changed its status to "participant" in this proceeding, as noted below.<sup>7</sup>

C.

#### Procedural Order

On January 21, 2009, the commission approved, with modifications, the proposed Stipulated Procedural Order submitted by the HECO Companies and the Consumer Advocate, as well as then-intervenors LOL, HREA, HDA, First Wind, DBEDT, HSEA and Blue Planet on December 26, 2008, pursuant to the Opening Order.<sup>8</sup>

In addition, on January 21, 2009, the commission issued a scoping paper titled, "Decoupling Utility Profits from Sales: Design Issues and Options for the Hawaii Public Utilities Commission" ("Scoping Paper"), prepared by the commission's

---

<sup>7</sup>On April 29, 2009, the commission issued an order granting a motion by First Wind to amend its status as an intervenor to a participant. On February 24, 2009, the commission issued an Order Approving Notice of Withdrawal, which approved LOL's withdrawal as a party in this docket.

<sup>8</sup>See Order Approving, with Modifications, Stipulated Procedural Order Filed on December 26, 2008, which was filed on January 21, 2009 ("Stipulated Procedural Order").

consultant, the National Regulatory Research Institute ("NRRI").

The Statement of Issues initially approved by the commission in the Stipulated Procedural Order was as follows:

1. Whether the joint proposal or any separate proposals that are submitted by the HECO Companies, the Consumer Advocate or other parties are just and reasonable?
2. Whether the decoupling mechanism(s) will result in accelerating the addition of new, clean energy resources in the HECO Companies' systems, while giving the HECO Companies an opportunity to achieve fair rates of return?
3. What should be the scope of and elements to be included in the decoupling mechanism?
4. How will decoupling impact the utilities, their customers, and the clean energy market?
5. Which issues and details regarding the implementation of the decoupling mechanism(s), including the determination of any revenue target, should be taken up in the context of individual rate case proceedings of HECO, HELCO and MECO?
6. Whether any cost tracking indices proposed for use in estimating revenue adjustment calculations can be expected to determine just and reasonable revenue adjustments on an on-going basis, accounting for the differences between the revenue requirement amounts determined in each utility's last rate case and:
  - (a) The current cost of operating the utility;
  - (b) Return on and return of ongoing capital investment; and

(c) Any changes in State or federal tax rates.

7. Whether any earnings monitoring/sharing, service quality provisions, or any other adjustments or considerations are appropriate to implement as part of the decoupling methodology in order to calculate ongoing revenue adjustments that are just and reasonable?
8. Whether any provisions for administrative procedures (e.g., utility filings, decoupling tariffs, deferral accounting provisions, customer notice provisions, planned review/audit procedures and any appeal or hearing provisions) are appropriate, necessary and sufficient to ensure that post test year decoupling adjustments are fair and reasonable?
9. How many years should the decoupling/attrition revenue mechanism remain in place for each of the utilities before the next rate cases are to be filed and under what conditions can the utility, the Commission or other parties initiate formal rate proceedings outside of such rate case intervals?
10. What accounting and regulatory reporting provisions are necessary to implement any decoupling provisions in a manner that will ensure reasonable definition, isolation and recovery of the types of costs that are to be separately tracked and charged to customers through other cost recovery mechanisms, such as Renewable Energy Infrastructure Program/Clean Energy Initiative, Energy Cost Adjustment Clause, Purchased Power, Demand Side Management, and other surcharge mechanisms?
11. Issues identified in the Commission's scoping paper in this docket.

D.

Decoupling Proposals

On January 30, 2009, the HECO Companies and the Consumer Advocate each submitted decoupling proposals pursuant to the Stipulated Procedural Order, as supplemented by the HECO Companies' revised pages filed February 3, 2009.

In February 2009, the Parties submitted comments on and responses to questions raised in the Scoping Paper.

On February 27, 2009, a technical workshop was held to review the HECO Companies' and Consumer Advocate's decoupling proposals.

On March 30, 2009 a Joint Proposal on Decoupling and Statement of Position of the HECO Companies and Consumer Advocate ("Initial Joint Proposal") was filed. A technical workshop/settlement discussion was held on April 20, 2009 in order to review the Initial Joint Proposal, along with alternative decoupling proposals and concerns submitted by HDA,<sup>9</sup> and by HREA.<sup>10</sup>

On May 11, 2009, the HECO Companies and Consumer Advocate filed their Joint FSOP, which included among other

---

<sup>9</sup>HDA's proposal was submitted as part of its response to the Scoping Paper, Question #2, filed February 19, 2009.

<sup>10</sup>HREA's proposal was submitted as part of its response to the Scoping Paper, Question #2, filed February 20, 2009.

things (1) a RBA tariff provision, (2) a RAM tariff provision and (3) an energy cost adjustment clause ("ECAC") heat rate deadband proposal. Final statements of position were also filed on May 11, 2009 by HDA, Blue Planet, HSEA, DBEDT and HREA. Pursuant to discussions that took place during a June 22, 2009 prehearing conference, the HECO Companies and Consumer Advocate filed revised and new exhibits to their Joint FSOP on June 25, 2009.

From March through August 2009, the Parties exchanged and responded to information requests ("IRs") issued among the Parties (including IRs regarding the Joint FSOP), and also responded to IRs and additional questions issued by the commission.

#### E.

##### Panel Hearing

Commencing on June 29, 2009, and ending on July 1, 2009, the commission held a panel-format evidentiary hearing, with Mr. Scott Hempling, Esq. moderating,<sup>11</sup> and Chairman Carlito Caliboso presiding with Commissioners John E. Cole and Leslie H. Kondo,<sup>12</sup> pursuant to the commission's June 16, 2009 Order

---

<sup>11</sup>The commission retained Mr. Hempling, Executive Director of NRRI, as moderator of the panel hearing.

<sup>12</sup>Citations to the transcript of the panel hearing are as follows: Transcript of Proceedings ("Tr."), followed by the applicable volume number ("Vol. \_\_") and page number(s), followed by the last name of

Establishing Hearing Procedures for the panel hearings, which order replaced the issues identified for the docket in the Stipulated Procedural Order with the following issues:

- I. Will Decoupling Help Achieve Hawaii's Objectives?
- II. Decoupling Mechanics: How Well Does the HECO Companies' Decoupling Design Achieve Hawaii's Objectives?
- III. Revenue Adjustment Mechanism: How Well Does it Achieve Hawaii's Objectives?
- IV. Revenue Per Customer Mechanism and Other Alternatives: How Well Do They Achieve Hawaii's Objectives?
- V. Energy Cost Adjustment Clause Amendment: What are Its Advantages and Disadvantages, In Terms of Hawaii's Objectives?
- VI. What Review Processes and Safeguards Should the Commission Consider?<sup>13</sup>

By letter dated July 13, 2009 and in response to questions raised by the commission during the panel hearings, the HECO Companies provided additional information and submitted

---

the individual in parentheses. For example, "Tr. Vol. I at 34 (Hempling)."

<sup>13</sup>On July 2, 2009, the commission issued its first of two interim decision and orders in Docket No. 2008-0083, HECO's 2009 test year rate case ("First Interim D&O"), which approved in part and denied in part HECO's request to increase its rates on an interim basis, as set forth in HECO's Statement of Probable Entitlement, filed in that docket on May 18, 2009. In particular, with respect to decoupling, the First Interim D&O noted that "[t]he commission has not yet determined that a sales decoupling mechanism and the establishment of HECO's proposed RBA are just and reasonable in the decoupling docket (Docket No. 2008-0274)" and accordingly "disallow[ed] any cost related to the implementation of the RBA at this time." Id. at 8.

additional amendments to the Joint FSOP that had been agreed to with the Consumer Advocate but inadvertently overlooked for inclusion in the then proposed RAM tariff.

The Parties submitted opening briefs and reply briefs on September 8, 2009 and September 29, 2009, respectively, pursuant to an extension of time granted by the commission on August 7, 2009.

On November 25, 2009, the HECO Companies filed their Interim Motion and an attached Memorandum in Support of Motion ("HECO Memo in Support"), which proposed further modifications to the Joint FSOP. More specifically, the Interim Motion requested interim approval of:

- (1) the establishment and implementation by Hawaiian Electric of the revenue balancing account ("RBA") (with a slight modification, as shown in Attachment 1 [thereto], to include only one RBA account for all residential and nonresidential customers) to be effective January 1, 2010;

- (2) the establishment and implementation by Hawaiian Electric of the revenue adjustment mechanism ("RAM") (with modifications, as shown in Attachment 2 [thereto], (a) to refund to ratepayers (with interest) RAM revenues associated with disallowed costs for Baseline Capital Projects, and (b) to include an interim performance metric as described in Part III.F of the [HECO Memo in Support]) to be effective, beginning with calendar year 2010;

- (3) both the Hawaiian Electric RBA and RAM to remain in effect until interim rates become effective pursuant to an interim decision and order in Hawaiian Electric's 2011 test year rate case, provided that Hawaiian Electric:

(a) does not file a 2010 test year rate case application, and

(b) files its 2011 test year rate case application by August 16, 2010;

(4) implementation by HELCO and MECO of the RBA and RAM (with slight modifications, as shown in Attachments 3-6 [thereto]) at such time as interim rates become effective pursuant to interim decision and orders in HELCO's and MECO's respective 2010 test year rate cases; and

(5) the continuation of this proceeding for the primary purpose of evaluating the design and potential adoption of clean energy-related decoupling performance metrics, with final statements of position to be filed by the parties no later than June 30, 2010.<sup>14</sup>

Between December 3 and December 11, 2009, the Parties responded to the Interim Motion and the HECO Memo in Support in memoranda.

Rather than issuing an interim order in the docket, on February 19, 2010, the commission issued its order approving the Amended Joint Proposal, and accordingly instructed the HECO Companies and Consumer Advocate to file a Proposed Final Decision and Order with joint proposed findings of fact and conclusions of law, as soon as practicable, but no later than 30 days from the date of the Order, for the commission's review and approval. All other parties were allowed to comment on the Proposed Final Decision and Order within five days of service or

---

<sup>14</sup>Interim Motion at 1-3 (footnotes omitted).

such other period ordered by the presiding officer pursuant to Hawaii Administrative Rules ("HAR") § 6-61-120(a).<sup>15</sup>

II.

DISCUSSION

A.

Amended Joint Proposal Summary

As modified by the June 25, 2009 Exhibits, July 13, 2009 Responses and the HECO Companies' Interim Motion, the key components of the Amended Joint Proposal applicable to each of the HECO Companies would include:

- (1) a sales decoupling mechanism, which would be implemented through the RBA Provision;
- (2) replacement of annual rate cases with a RAM, consisting of an operations and maintenance ("O&M") and other expense RAM component and a Rate Base RAM component, which is in the form of the RAM Provision; to coincide with planned triennial staggered rate cases for each of the HECO Companies to re-calibrate RAM inputs using commission approved values.<sup>16</sup>

---

<sup>15</sup>See Order at 2.

<sup>16</sup>The Amended Joint Proposal includes a proposal for a three-year decoupling cycle where rate cases are filed for test years that are three years apart. However, rate cases for all three companies are supported by the same regulatory department and the same witnesses for certain testimonies. In order to minimize the need for resources and be able to submit rate cases of the highest quality possible in the future, the rate cases after the initial decoupling cycle will be staggered so that three-year rate case cycles can commence thereafter for each company. The second decoupling cycle will begin with HECO's 2011 test year rate case, followed by either MECO's or HELCO's test year rate cases of 2012 and then MECO's or HELCO's test year rate cases of 2013.

- (3) protection against excessive overall utility revenue levels through an Earnings Sharing Revenue Credit mechanism, which would be implemented through the RAM Provision;
- (4) other consumer protection features in the RAM Provision (in addition to the Earnings Sharing Revenue Credit mechanism), including:
  - a. a provision for Major Capital Projects Credits;
  - b. a provision for Baseline Capital Projects Credits;
  - c. notification provided to all affected customers of the RAM filing in newspapers and bills in a timely manner;
  - d. evaluation procedures for filing, examination and any exceptions to the annual RBA/RAM filings;
  - e. continued ability of the HECO Companies or the Consumer Advocate to initiate formal rate proceedings to replace and terminate RAM at any time on a schedule other than planned;
  - f. formal review, prior to continuation, termination or modification of decoupling, as part of the next round of HECO Companies' rate case proceedings;
- (5) a proposal to establish sales heat rate deadbands and provisions to reset the fixed sales heat rate factor in the ECAC; and
- (6) the requirement of the HECO Companies to include a report on the status of certain HCEI initiatives in their next base rate cases.

B.

#### Issues

The Amended Joint Proposal of the HECO Companies and

the Consumer Advocate was designed to be responsive to the issues that were listed for consideration in this docket. Although the commission examines each of the foregoing issues separately, to the extent that the discussion in one section is applicable to another section, this Decision and Order should be read in conjunction with, and in the context of, this entire Decision and Order.

1.

Whether Decoupling Will Help Achieve Hawaii's Objectives

The first issue in this docket is: "Will Decoupling Help Achieve Hawaii's Objectives?"<sup>17</sup>

a.

Hawaii's Objectives

The State's energy objectives and policies, as set forth in Hawaii Revised Statutes ("HRS") § 226-18, include a number of provisions relating to energy independence, renewable energy and energy efficiency:

(a) Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all:

(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;

(2) Increased energy self-sufficiency where

---

<sup>17</sup>Order Establishing Prehearing Procedures at 5.

the ratio of indigenous to imported energy use is increased;

(3) Greater energy security and diversification in the face of threats to Hawaii's energy supplies and systems; and

(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use.

(b) To achieve the energy objectives, it shall be the policy of this State to ensure the short- and long-term provision of adequate, reasonably priced, and dependable energy services to accommodate demand.

(c) To further achieve the energy objectives, it shall be the policy of this State to:

(1) Support research and development as well as promote the use of renewable energy sources;

\* \* \*

(4) Promote all cost-effective conservation of power and fuel supplies through measures, including:

\* \* \*

(C) Adoption of energy-efficient practices and technologies;

\* \* \*

(6) Support research, development, demonstration, and use of energy efficiency, load management, and other demand-side management programs, practices, and technologies;

\* \* \*

(8) Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications . . . .<sup>18</sup>

Consistent with the foregoing policies and objectives, the signatories to the Energy Agreement acknowledge the need for a commitment to "move more decisively and irreversibly away from imported fossil fuel for electricity and transportation and towards indigenously produced renewable energy and an ethic of energy efficiency."<sup>19</sup> The Energy Agreement provides that the parties to the agreement will pursue a wide range of actions, including decoupling, with the purpose of decreasing the State of Hawaii's dependence on imported fossil fuels through substantial increases in the use of renewable energy and implementation of new programs intended to secure greater energy efficiency and conservation. At the same time, the Energy Agreement recognizes that a system of utility regulation will be needed to assure that Hawaii preserves a stable electric grid and a financially sound electric utility as vital components of the State's renewable energy future.<sup>20</sup> To that end, Section 28 of the Energy Agreement provides:

---

<sup>18</sup>Emphasis added.

<sup>19</sup>Energy Agreement at 1.

<sup>20</sup>See id. at 1.

## Decoupling from Sales

The transition to Hawaii's clean energy future can be facilitated by modifying utility ratemaking with a decoupling mechanism that fits the unique characteristics of Hawaii's service territory and cost structure, and removes the barriers for the utilities to pursue aggressive demand-response and load management programs, and customer-owned or third-party-owned renewable energy systems, and gives the utilities an opportunity to achieve fair rates of return. The parties agree in principle that it is appropriate to adopt a decoupling mechanism that closely tracks the mechanisms in place for several California electric utilities .

. . .

The State's commitment to clean energy is also evident in legislation recently enacted in accordance with the Energy Agreement, such as Act 155 of the 2009 Session Laws of Hawaii ("Act 155"), which increases the electric utilities' 2020 renewable portfolio standards ("RPS") requirement from 20% to 25%, and adds a new 40% requirement for the year 2030. Prior to January 1, 2015, at least 50% of a utility's RPS must be met by "electrical generation using renewable energy as the source". After January 1, 2015, however, a utility's entire RPS will need to be met by renewable generation, and "electrical energy savings" will no longer count toward RPS requirements.<sup>21</sup>

In the Decision and Order Relating to RPS Penalties, issued December 19, 2008 in the RPS proceeding, Docket No. 2007-0008, the commission approved a discretionary penalty of \$20 for

---

<sup>21</sup>See Hawaii's RPS law, Title 15, Chapter 269, Part V, HRS.

every megawatt-hour ("MWh") that an electric utility is deficient under Hawaii's RPS law. Thus, an electric utility could be subject to penalties if it fails to meet the RPS standards.

In addition to increasing RPS requirements, Act 155 directs the commission to establish "energy-efficiency portfolio standards that will maximize cost-effective energy-efficiency programs and technologies." In particular, the legislation requires that the energy efficiency portfolio standards ("EEPS") be designed to achieve 4,300 GWh of electricity use reductions statewide by 2030, with interim commission-established goals for 2015, 2020 and 2025. On March 8, 2010, the commission opened Docket No. 2010-0037, Instituting a Proceeding to Investigate Establishing Energy Efficiency Portfolio Standards, Pursuant to Act 155, Session Laws of Hawaii 2009 and Hawaii Revised Statutes § 269-96.

b.

#### Overview of Decoupling

Traditional utility ratemaking provides for the recovery of some utility fixed costs through volumetric rate elements, which can produce a disincentive to energy efficiency and customer sited renewable energy that may restrain electric utility efforts to fully support these initiatives. The Amended

Joint Proposal is designed to overcome this disincentive by "de-linking" utility sales volumes from cost recovery.<sup>22</sup>

Typically, utilities (like the HECO Companies) recover their fixed costs partially through fixed charges, such as customer charges, and partially through volumetric charges such as energy (or per kilowatt-hour ("kWh") charges). This rate design works better for utilities when sales gradually increase from year to year, as increases in revenues may then be sufficient to recover the fixed costs approved by regulators in the last rate case, while also compensating the utility for: (1) cost escalation due to needed expansion or modernization of system infrastructure, service volumes and inflation, and (2) inflation in input prices for labor and services, all while (3) maintaining an adequate return on rate base to attract investors.<sup>23</sup>

However, if sales are stagnant or are on a long-term decreasing trend, the falling revenues may not fully recover fixed or gradually increasing costs. This can lead to erosion of utility earnings and financial performance, and a reduction in the utility's capacity to invest in needed infrastructure to

---

<sup>22</sup>See Revenue Decoupling Proposal of the Hawaiian Electric Companies, filed January 30, 2009 at 2.

<sup>23</sup>See id. at 2.

support reliability and public policy priorities such as renewable energy.<sup>24</sup>

Under traditional ratemaking the conventional solution to any declining sales/growing costs situation is to initiate a rate case. However, since rate proceedings usually take many months to adjudicate, it is not unusual for utilities to need to file rate cases in quick succession in an effort to reset their rates to compensate for falling sales and increasing costs.<sup>25</sup>

Conservation, energy efficiency and customer-sited renewable generation contribute to falling utility sales and in turn, revenues, which can be expected to result in significant negative financial impacts to utilities. De-linking (i.e., “decoupling”) utility sales from utility revenues eliminates the disincentive to support and promote conservation, energy efficiency and renewable generation that utilities face under traditional ratemaking.<sup>26</sup> The concept of decoupling is not new to Hawaii. For instance, in Docket No. 6617 wherein the commission investigated the implementation of integrated resources planning, various parties suggested that, even at that time, decoupling was a necessary mechanism to ensure that the

---

<sup>24</sup>See id. at 2-3.

<sup>25</sup>See id. at 3.

<sup>26</sup>See id. at 3.

integrated resources planning, including the implementation of demand-side management, proceeded meaningfully. Decoupling can be accomplished using different mechanisms and formulae. Given the stated objectives of Hawaii's clean energy initiative, however, the signatories to the Energy Agreement sought to implement a decoupling mechanism that would facilitate the goals of the Energy Agreement while not impairing the financial viability of Hawaii's electric utility companies. To that end, the decoupling mechanism included in the Amended Joint Proposal includes a sales decoupling mechanism (i.e., the RBA Provision) and a revenue adjustment mechanism (i.e., the RAM Provision).

The purpose of the RBA Provision is to completely remove the linkage between utility sales and revenues, in order to encourage utility support for energy efficiency and the substitution of renewable resources. In essence, the RBA Provision provides a process to capture the difference between a target revenue requirement and actual billed revenues being collected, and to adjust rate levels (through an adjustment clause) to make up the difference.<sup>27</sup>

The purpose of the RAM Provision is to adjust revenues that have been decoupled from sales to also reflect changes in revenue requirements between rate cases, in order to help

---

<sup>27</sup>See id. at 6.

maintain the HECO Companies' financial integrity and ability to invest in the infrastructure necessary to meet Hawaii's 70% clean energy objective, while maintaining reliable service to customers. Additionally, the RAM Provision is intended to replace frequent rate case filings with conservatively calculated revenue changes to be effective between triennial scheduled future rate cases.

As the Energy Agreement recognizes, utility costs and the need to make investments in infrastructure generally increase over time. Under traditional ratemaking, sales increases between rate cases have historically provided the utility an opportunity to recover the associated cost increases. However, setting a fixed target revenue requirement that does not change between rate cases under sales decoupling provides no revenue growth to the utility to offset increases in utility costs or infrastructure investments. Therefore, there is a need to allow gradual, formulistically-determined increases in the target revenue requirement level each year. This is accomplished through the RAM.<sup>28</sup>

There are many forms of RAMs. The Amended Joint Proposal utilizes a hybrid RAM, in which O&M expenses are escalated using a formula that includes inflation or input cost

---

<sup>28</sup>See id. at 6-7.

escalators (a formulaic approach), and rate base is updated based on recorded amounts plus a trended forecast of additions and changes. The term "hybrid" refers to the combination of formulaic and forecast approaches to derive the annual change in target revenue requirements.<sup>29</sup>

c.

#### Parties' Positions

As discussed below, the Parties generally agree that decoupling will help to achieve Hawaii's objectives.

#### HECO Companies

According to the HECO Companies, the Amended Joint Proposal is intended to be consistent with the decoupling mechanism agreed to in the Energy Agreement.<sup>30</sup> While not binding upon the commission, the Energy Agreement described many of the key parameters of decoupling. The HECO Companies maintain that decoupling supports key energy policy objectives -

by delinking revenues from sales through the sales decoupling mechanisms, and by allowing annual adjustments in the utilities' base revenues (in between regularly scheduled rate cases). Thus, decoupling properly and effectively aligns regulatory financial outcomes (i.e, incentives) with State Energy Policy.<sup>31</sup>

---

<sup>29</sup>See id. at 7.

<sup>30</sup>See HECO Opening Brief at 47-48.

<sup>31</sup>Id. at 6.

The HECO Companies also note that:

The benefits of decoupling extend beyond the need for decoupling. Sales decoupling, by breaking the link between sales and earnings, eliminates the financial penalty incurred by utilities through cost-effective energy efficiency measures and customer-sited distributed renewable energy generation that reduce sales. Thus, sales decoupling encourages utility support for energy efficiency measures and distributed renewable energy generation.<sup>32</sup>

In addition, the HECO Companies contend that decoupling will help to maintain "a financially sound utility that has the financial capability to maintain and invest in its infrastructure to accommodate increased renewable sources of energy" and "serve as a credit worthy off-taker of the planned renewable energy projects."<sup>33</sup>

#### Consumer Advocate

The Consumer Advocate, in its Opening Brief, states that "[t]he provisions of this Joint FSOP are designed to achieve Hawaii's objectives regarding just and reasonable rates, administrative simplicity and efficiency and protection of the financial health of the utilities as HCEI Agreement

---

<sup>32</sup>Reply Brief of Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited, filed September 29, 2009 ("HECO Reply Brief") at 4; see HECO Opening Brief at 8-10.

<sup>33</sup>HECO Companies responses to NRRI Scoping Paper, Appendix 2 Questions, Question #6 at 1, filed February 20, 2009.

implementation occurs.”<sup>34</sup> According to the Consumer Advocate:

While annual rate cases may seem acceptable in spite of the tremendous costs and administrative burdens they impose upon Commission and Consumer Advocate resources, another problem is raised by maintaining the status quo form of regulation. The financial strength of the utility can be undermined by regulatory lag whenever costs are increasing more rapidly than they can be recovered through traditional rate case processes. The HECO Companies must continue to invest in replacement plant to maintain reliability of existing infrastructure, while also raising capital to fulfill the substantial obligations they have accepted under the HCEI Agreement. The HECO Companies' access to capital on reasonable terms is essential to the ability of the state to pursue the HCEI objectives. Noting a stated objective in this Docket, "...to maintain the utility's ability to cover its prudent fixed costs so that it can attract capital on reasonable terms sufficient to fill its statutory obligations," the Consumer Advocate submits that a conservatively designed RBA/RAM mechanism is a better solution than continued frequent traditional rate cases during the implementation of the HCEI provisions.<sup>35</sup>

DBEDT

"DBEDT believes that a well designed decoupling [mechanism] will help achieve Hawaii's objectives. Decoupling helps remove the barriers to the utilities to aggressively promote and accommodate clean and renewable resources by ensuring utility cost recovery and reducing or eliminating

---

<sup>34</sup>Division of Consumer Advocacy's Post-Hearing Opening Brief, filed September 8, 2009 ("Consumer Advocate Opening Brief") at 13; see also Tr. Vol. III at 700-01 (Awakuni).

<sup>35</sup>Consumer Advocate Opening Brief at 12-13.

regulatory lag.”<sup>36</sup> According to DBEDT, “A decoupling mechanism will help reduce or eliminate this regulatory lag, thereby allowing the HECO Companies more timely cost recovery, and therefore facilitate their ability to deliver on their commitments in the Energy Agreement.”<sup>37</sup>

#### HDA

HDA’s Opening Brief, in which HREA joins,<sup>38</sup> states that decoupling “would improve the alignment of the utilities’ financial incentives with Hawaii’s objectives to increase utilization of renewable resources, reduce consumption of fossil fuel and promote efficient use of energy.”<sup>39</sup> According to HDA, decoupling “would also increase the stability of utility revenues and would thus promote the utilities’ ability to attract capital.”<sup>40</sup>

#### Blue Planet

---

<sup>36</sup>The Department of Business, Economic Development, and Tourism’s Opening Brief, filed September 8, 2009 (“DBEDT Opening Brief”) at 5.

<sup>37</sup>Id. at 9.

<sup>38</sup>See Hawaii Renewable Energy Alliance’s Joinder to Haiku Design and Analysis’s Post-Hearing Opening Brief Filed On September 8, 2009, filed September 8, 2009 (“HREA Joinder”).

<sup>39</sup>Haiku Design and Analysis Opening Brief, filed September 7, 2009 (“HDA Opening Brief”) at 10.

<sup>40</sup>Id. at 10.

Blue Planet's Opening Brief, in which HSEA joins,<sup>41</sup> states that, "In general, Blue Planet supports adoption of the Joint Decoupling Proposal . . . ."<sup>42</sup>

d.

#### Findings

Based on the record in this docket, the commission finds that decoupling will help to achieve Hawaii's objectives by eliminating the financial penalty experienced by utilities as a result of the implementation of cost-effective energy efficiency measures and customer-sited distributed renewable energy generation that reduce sales. While Hawaii could rely only on setting specific RPS mandates and other similar clean energy objectives, relying only on mandates or other similar "command and control" techniques may not yield the desired results. As suggested by the Parties, decoupling represents a possible means of enhancing Hawaii's commitment to wean itself from fossil fuels. Thus, decoupling supports the achievement of the RPS by the utilities and supports the EEPS. Decoupling also helps reduce or eliminate regulatory lag, thereby allowing the HECO Companies more timely cost recovery, which facilitates

---

<sup>41</sup>See Hawaii Solar Energy Association's Joinder to Blue Planet Foundation's Post-Hearing Opening Brief Filed On September 8, 2009, filed September 8, 2009 ("HSEA Joinder").

<sup>42</sup>Opening Brief of Blue Planet Foundation, filed September 8, 2009 ("Blue Planet Opening Brief") at 10.

their ability to deliver on their commitments in the Energy Agreement. All Parties supported the adoption of decoupling by the HECO Companies. Accordingly, while decoupling represents a new means of regulation and questions might still exist about the efficacy of decoupling, with the adoption of the protective measures described later, the commission finds that decoupling will improve the alignment of the utilities' financial incentives with Hawaii's objectives to increase utilization of renewable resources, reduce consumption of fossil fuel and promote efficient use of energy.

2.

Ability of Sales Decoupling to Achieve Hawaii's Objectives

The second issue in this docket is: "Decoupling Mechanics: How Well Does the HECO Companies' Decoupling Design Achieve Hawaii's Objectives?"<sup>43</sup> It was noted by the Parties that alternative forms of decoupling, beyond those advanced within the Joint FSOP submitted by the HECO Companies and the Consumer Advocate, have been employed in other jurisdictions. Certain proposed alternatives to the RBA/RAM approach are discussed separately in Section II.B.4 of this Decision and Order, while this Section focuses upon the Joint FSOP design relative to Hawaii's objectives.

---

<sup>43</sup>Order Establishing Prehearing Procedures at 5.

The first of two key components of the Amended Joint Proposal is the RBA Provision to implement sales decoupling, which breaks the link between sales and electric revenue. The RBA is designed to track changes in actual sales relative to commission-approved levels of target base revenues, adjusting future rates to ensure that the intended target revenue levels are ultimately fully collected by the utilities.

Under sales decoupling, electric revenue actually collected by the utility between rate cases is no longer a function of changes in the volume of MWh sales. As proposed in the Amended Joint Proposal, a commission-approved revenue requirement will be set through a rate proceeding and the utility will be allowed to adjust its rates between rate cases to recover no more or less than that revenue requirement, with interest accrued on any differences. The target revenue level equals the base revenue requirement<sup>44</sup> less revenues for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause ("PPAC") and all revenue being separately tracked or recovered through any other

---

<sup>44</sup>As defined in Section B of the RBA Provision and further discussed herein, the "target revenue" is the most recent Authorized Base Revenue approved by the commission, plus or minus the RAM Revenue Adjustment calculated under the RAM Provision tariff. The commission-approved level of revenues would also be subject to revision between rate cases through the RAM Provision.

surcharge or rate tracking mechanism.<sup>45</sup>

The RBA Provision then allows the utility to record and capture the difference between the target revenue and recorded adjusted revenues collected,<sup>46</sup> and to later adjust rate levels (through an adjustment clause provision in the RBA Provision) to make up the difference. Details of the RBA are discussed below in Section II.B.2.a of this Decision and Order.

Under traditional ratemaking without decoupling, any sales increases occurring between rate cases provided the utility an opportunity to realize revenue growth that served to offset cost increases associated with inflation and additional required facilities. Alternatively, in periods when sales reductions occur between rate cases, the resulting revenue declines can contribute to earnings attrition and weaken the financial strength of the utility. Decoupling of sales from revenues will stabilize utility revenues irrespective of changes in sales volumes. However, fixing target revenues that do not change between rate cases under sales decoupling provides no revenue growth opportunity to the utility to help offset

---

<sup>45</sup>See Joint FSOP at 10-11.

<sup>46</sup>Recorded revenues collected would be adjusted in the same way as described for target revenues except that the revenue excluded would also include revenue from the ECAC. The ECAC automatically increases or decreases charges to reflect changes in the HECO Companies' energy costs of fuel and purchased energy above or below the levels included in base rates. Joint FSOP at 11 n.10.

inflationary pressures upon utility costs or new infrastructure investments. Therefore, beyond simply assuring constant revenues via the RBA Provision, there is also a need to allow controlled increases in target revenue levels each year if costly and time-consuming annual rate cases are to be avoided. This controlled, formula-driven updating of target revenues is accomplished through a revenue adjustment mechanism, or RAM,<sup>47</sup> which is the second key component of the Amended Joint Proposal. Details of the RAM are discussed below in Section II.B.3.a of this Decision and Order.

a.

#### Sales Decoupling and RBA Details

Under the Amended Joint Proposal, sales decoupling will be implemented through the RBA Provision, through which the utility's revenues will be delinked from sales by setting the utilities' target revenues to the most recent authorized revenues approved in the utility's most recent rate case.<sup>48</sup> Accounting records will be maintained to record (1) the difference between the utilities' target revenue and recorded adjusted revenue, and (2) monthly interest applied to the simple

---

<sup>47</sup>See Joint FSOP at 11-13.

<sup>48</sup>See HECO Opening Brief at 27.

average of the beginning and ending month balances in the RBA.<sup>49</sup>

As noted previously, the RBA target revenue will be the most recent Authorized Base Revenue<sup>50</sup> approved by the commission in an interim or final decision and order in a rate case, or the re-determined Authorized Base Revenue level, based on the additional annual amount of revenue required to recover certain costs calculated according to the RAM Provision since the most recent rate case, further adjusted to remove amounts for applicable revenue taxes and less any refunds due to the Earnings Sharing Revenue Credits, Major Capital Projects Credits or Baseline Capital Projects Credits.<sup>51</sup> The target revenue will

---

<sup>49</sup>The accrual of interest is proposed at an annual rate of 6% - the same as that accrued on customer deposits and specified in the HECO Companies' tariffs - applied to the simple average of the beginning and ending monthly RBA balances. This is an annual simple interest rate (i.e., one-twelfth of this rate will accrue per month). See RBA Provision at 2; HECO Opening Brief at 38.

<sup>50</sup>HECO Opening Brief at 36. As further defined in the RAM Provision and discussed herein, "Authorized Base Revenue" represents the annual amount of revenue required for the utility to recover its estimated O&M, depreciation, amortization and tax expenses for the RAM Period, as well as the Return on Investment on projected rate base for the RAM Period, using the ratemaking conventions and calculations reflected within the most recent rate case decision and order issued by the commission.

<sup>51</sup>As further defined in the RAM Provision and discussed herein, "Earnings Sharing Revenue Credits" are the amounts to be returned to customers as credits through the RBA Provision, so as to implement the earnings sharing percentages and procedures described in the RBA Provision, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1;

"Major Capital Projects" are those capital investment projects that require application and commission approval under the commission's General Order No. 7 as authorized in Decision and Order

exclude revenues for fuel and purchased power expenses that are recovered either in base rates or in a PPAC, as well as all other revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism.<sup>52</sup>

The recovery provision of the RBA Provision provides for collection or return of the accumulated calendar year-end balance in the RBA and for recovery of the RAM Revenue Adjustment<sup>53</sup> as described in the RAM Provision.<sup>54</sup> This recovery

---

No. 21002 filed on May 27, 2004, but excluding those Major Capital Projects included in the Clean Energy Infrastructure Surcharge;

"Baseline Capital Projects" are the total amounts of capital investment completed and closed to plant-in-service, excluding amounts related to Major Capital Projects;

"Major Capital Projects Credits" are the amounts to be returned to customers through the RBA Provision, to reduce the preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific major capital projects that were not placed into service within the first nine months of the preceding RAM Period as expected; and

"Baseline Capital Projects Credits" are the amounts to be returned to customers through the RBA Provision, to reduce the preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific baseline capital projects that are disallowed by the commission in a subsequent rate case if the disallowance reduces actual Baseline Capital Projects costs below the Baseline Capital Projects cost estimate.

Authorized Base Revenue and the Earnings Sharing Revenue Credits mechanism are further discussed below in Sections II.B.3 and II.B.6 of this Decision and Order.

<sup>52</sup>Joint FSOP at 10-11.

<sup>53</sup>As further defined in the RAM Provision and discussed herein, the "RAM Revenue Adjustment" represents the difference between the calculated Authorized Base Revenue for the RAM Period and either: (1) the previous year's calculated Authorized Base Revenue; or (2) the

will occur pursuant to detailed procedures set forth in the RBA and RAM Provision tariffs, as more fully described below.

The Amended Joint Proposal anticipates that on or before the Annual Evaluation Date of March 31<sup>st</sup> of each year<sup>55</sup> each company implementing decoupling will file with the commission a revision to its RBA Provision to reset the RBA rate adjustment<sup>56</sup> in accordance with the RBA and RAM Provisions<sup>57</sup> as an automatic rate adjustment clause. The proposed effective date will be June 1<sup>st</sup>, 61 days after filing, providing adequate time for review. As required under HAR §§ 6-61-61 and 6-61-111, based upon the HECO Companies' filed schedules, the Amended Joint Proposal provides for a 47-day review period following the

---

revenue requirement approved by the commission in an interim or final decision in the company's general rate case, whichever is more recent.

<sup>54</sup>HECO Opening Brief at 36-38. As a further safeguard, the RBA mechanism provides that the target revenue will be revised to correct for any errors in the calculation of the RAM Revenue Adjustment for any previous period to the extent that such errors are identified 15 days prior to the implementation date specified in the RAM Provision. Joint FSOP at 25-26.

<sup>55</sup>As defined in the RAM Provision and further discussed herein, the "Annual Evaluation Date" is the date the company will make its annual filing under the RAM Provision. The Annual Evaluation Date may be no later than March 31, of each year commencing March 31, 2010.

<sup>56</sup>As further defined in the RBA Provision and discussed below, the "RBA rate adjustment" or "RBA Adjustment" is comprised of the calculated values from the provision for recovery of balancing account amounts, adjusted to include amounts for applicable revenue taxes. The RBA rate adjustment is calculated based on the company's forecast of MWh sales over the RBA rate adjustment recovery period.

<sup>57</sup>Joint FSOP at 24.

March 31<sup>st</sup> Annual Evaluation Date.<sup>58</sup> Thus, the Consumer Advocate and other parties will have up to the 15<sup>th</sup> day before the June 1<sup>st</sup> effective date of the tariff to file any protests. In the absence of any protests, the RBA rate adjustment, incorporating the RAM Revenue Adjustment, will be effective on June 1<sup>st</sup>.<sup>59</sup> The RBA Provision also allows revisions to correct for any errors in the calculation of the RAM Revenue Adjustment for any previous period, even if such errors are not discovered within the initial 47-day review period.<sup>60</sup>

As provided in the RAM Provision,<sup>61</sup> all affected customers will be notified of the filings via publication in newspapers of general circulation within 30 days of the filing and by notification with the HECO Companies' billing statements within 60 days after the filing has been made.<sup>62</sup> In addition, the Amended Joint Proposal requires the HECO Companies to revise their RBA Rate Adjustments when necessary during the year to reset target revenues based on the commission's issuance of

---

<sup>58</sup>This is 15 days before the effective date of the proposed RBA adjustment rate.

<sup>59</sup>The commission's current procedure is to confirm the effective date of tariffs filed with the commission in its monthly Tariff Order.

<sup>60</sup>RBA Provision at 2, "TARGET REVENUE".

<sup>61</sup>See RAM Provision at 9-10.

<sup>62</sup>Joint FSOP at 24; see HRS § 269-16(b).

subsequent interim or final decision and orders in pending rate cases.<sup>63</sup>

The amortization of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations, will be recovered through a single per-kWh RBA rate adjustment for residential and non-residential customers, over the 12 months from June 1<sup>st</sup> of the current calendar year to May 31<sup>st</sup> of the succeeding calendar year.<sup>64</sup>

Under the Amended Joint Proposal, a single target revenue level would be established for residential and non-residential customers. The advantages of having only one RBA instead of two RBAs (i.e., residential and non-residential separately) as originally proposed by the HECO Companies and the Consumer Advocate include simplicity of administration, smoothing of customer impacts between rate cases and an allocation of costs that is a proxy for a revised cost-of-service study.<sup>65</sup>

---

<sup>63</sup>Joint FSOP at 23.

<sup>64</sup>See RBA Provision at 2-3.

<sup>65</sup>HECO Memo in Support at 11. The Consumer Advocate concurred with this modification in its Reply Brief, and urges its inclusion in this Decision and Order. See Division of Consumer Advocacy's Comments on HECO's Motion for Interim Approval of a Decoupling Mechanism for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited, filed December 11, 2009 ("Consumer Advocate Comments") at 5.

### Establishment of RBA Provisions

In its 2009 test year rate case, HECO requested the establishment of a RBA with the commission's issuance of the First Interim D&O to record the monthly differences between the approved interim revenue requirement<sup>66</sup> and the recorded adjusted revenues as defined in the RBA Provision.<sup>67</sup> However, as discussed above in Section I.E of this Decision and Order, the commission's First Interim D&O disallowed any mechanisms or expenses related to programs or applications that had not yet been approved at that time, including implementation of the RBA.<sup>68</sup>

With the commission's approval of decoupling in the Order issued on February 19, 2010 in the instant proceeding, HECO began tracking target revenues and recorded adjusted revenues on February 20, 2010, based on the effective date of the tariff that implemented the Second Interim D&O.

MECO and HELCO have also filed requests for the establishment of their RBA tariffs, along with proposed RAM Provisions, in their general rate increase applications for the 2010 test year in Docket Nos. 2009-0163 and 2009-0164,

---

<sup>66</sup>The allocation of the authorized revenue requirements to the remaining months in the test year is specified in the RBA Provision.

<sup>67</sup>Docket No. 2008-0083, Rate Case Update, HECO T-1, at 8-11.

<sup>68</sup>First Interim D&O at 7-8.

respectively.<sup>69</sup> These MECO and HELCO tariffs are attached hereto as Exhibits 3 and 5, respectively, but would not become effective for accounting purposes until the commission issues its interim decision(s) in those rate case dockets which would then serve to define RBA authorized base revenues for each utility.

HECO's initial RBA Provision<sup>70</sup> filing is anticipated to take place on March 31, 2010 to establish the RBA Adjustment rate which will recover the December 31, 2009 RBA balance<sup>71</sup> and the calculated RAM Revenue Adjustment for 2010. The effective date of the RBA Adjustment rate will be June 1, 2010, as reflected in the Joint FSOP. The RAM Revenue Adjustment for the 2010 calendar year would be designated interim and subject to refund in the event the commission finds a lower authorized base revenue amount to be reasonable for HECO's 2009 test year in its

---

<sup>69</sup>See MECO's Application, filed September 30, 2009 in Docket No. 2009-0163 at 2, 5; HELCO's Application, filed December 9, 2009 in Docket No. 2009-0164 at 2, 5. With respect to MECO, RBA and RAM tariff proposals were submitted with that company's direct testimony exhibits and IR responses filed in Docket No. 2009-0163. See MECO-108 at 55-57 (Maui Division RBA); MECO-109 at 59-61 (Lanai Division RBA); MECO-110 at 53-55 (Molokai Division RBA); MECO response to CA-IR-23, Attachment 1 at 70-80 (Maui Division RAM), Attachment 2 at 71-81 (Lanai Division RAM) and Attachment 3 at 76-86 (Molokai Division RAM). With respect to HELCO, RBA and RAM tariff proposals were submitted with that company's direct testimony exhibits filed in Docket No. 2009-0164. See HELCO-106 at 24-26 (RBA) and 9-19 (RAM).

<sup>70</sup>The RBA Provision has been be modified to reflect the Amended Joint Proposal.

<sup>71</sup>The HECO RBA balance at December 31, 2009 was "0", as the RBA had not been approved and established at that time.

final decision and order in Docket No. 2008-0083.<sup>72</sup>

Similarly, the establishment of RBAs by MECO and HELCO will take place with the commission's authorization in those companies' respective 2010 test year rate case interim orders. The initial RBA Provision filings will then take place on or before March 31<sup>st</sup> following the commission's interim decision and orders in MECO's and HELCO's respective 2010 test year rate cases. The proposed MECO and HELCO RBA Provisions are nearly identical to HECO's RBA Provision. Like HECO's RBA Provision, the MECO and HELCO provisions would be applicable to all rate schedules in place at the time the RBA Provisions become effective.

MECO and HELCO will follow the same filing and notice procedures described above for HECO, commencing after the interim decision and orders issued in their respective 2010 test year rate cases. Like HECO, the initial MECO and HELCO RBA and RAM Revenue Adjustments are designated interim and subject to refund in the event that the commission finds a lower authorized base revenue amount to be reasonable for those test years in its final decision and orders.<sup>73</sup>

#### RBA Adjustment Supporting Documentation

---

<sup>72</sup>RAM Provision at 3; Joint FSOP at 23.

<sup>73</sup>Joint FSOP at 23-24.

In their annual RBA Adjustment filings on March 31<sup>st</sup> of each year, the HECO Companies will also provide the schedules and supporting documentation for the calculation of all elements of the proposed rate change, including the amortization of accumulated RBA balances, calculations to implement the earnings sharing mechanism and RAM Revenue Adjustment as described in the RAM Provision.<sup>74</sup> RAM and earnings sharing calculations will be submitted concurrently as part of the RBA Adjustment filings for each utility, along with each respective company's calculation (with supporting documentation) of the historical five-year average of baseline and Major Capital Projects' plant-in-service and contributions in aid of construction ("CIAC"), depreciation expense, and accumulated deferred income taxes ("ADIT").<sup>75</sup>

The data components for the filings will be the RBA balances to support the RBA rate adjustments and the company's annual earnings sharing and RAM Revenue Adjustment schedules identified in §§ 1 and 2 of the RAM Provision, respectively, as well as projected total company sales for the RAM Period.<sup>76</sup> Workpapers will also be provided that support the derivation and

---

<sup>74</sup>The RAM adjustment and earnings sharing are described in greater detail below in section II.B.3.a of this Decision and Order.

<sup>75</sup>Joint FSOP at 25.

<sup>76</sup>As defined in the RAM Provision and further discussed below, the "RAM Period" is the calendar year containing the annual evaluation date.

calculation of the monthly allocation factors and the per kWh charge.<sup>77</sup> Sources for this data will include actual and adjusted financial reports used for earnings review purposes; the documentation for plant additions, GDPPI and wage indices; and the interim or final decision and orders from the HECO Companies' rate proceedings.

#### Bill Presentation of RBA Adjustments

The Amended Joint Proposal calls for a single per kWh decoupling adjustment for both residential and non-residential customers. The dollar value of such per kWh adjustments can be presented as a separate line item on the customer bill, can be combined with a particular bill component on the customer bill, or can be reflected within each bill component on the customer bill. The HECO Companies have stated that the existing billing system cannot practically accommodate a line item for a decoupling adjustment for each bill component on the customer bill, and even if it could, such a bill presentation would be unduly complex and likely confusing to most customers.<sup>78</sup> Accordingly, the Amended Joint Proposal proposes to present a single decoupling adjustment as a separate line item on customer

---

<sup>77</sup>Joint FSOP at 25.

<sup>78</sup>Id. at 26-27.

bills for purposes of simplicity and transparency.<sup>79</sup>

b.

#### Positions of the Parties

In the opening briefs filed by the Parties, no party objected to the establishment of the RBA for the HECO Companies, as pointed out by the Consumer Advocate.<sup>80</sup> According to the HECO Companies, the proposed RBA is conservative in design, simple, and workable with filings and review procedures.<sup>81</sup> The issues that were raised by the parties other than the Consumer Advocate and the HECO Companies were primarily focused upon details of the RAM provision, alternatives to the RAM, the ECAC and Energy Agreement performance measures, rather than on any specific concerns with the pure decoupling accomplished by the RBA provision.

#### HECO Companies

With respect to HECO, the HECO Companies state that if

---

<sup>79</sup>Id.

<sup>80</sup>See Consumer Advocate Opening Brief at 16; see also Blue Planet Opening Brief at 10; DBEDT Opening Brief at 26; HDA Opening Brief at 11; HREA Joinder at 1; HSEA Joinder at 1. Although, as further discussed below, Blue Planet recommended in its Reply Brief that the commission consider ordering the HECO Companies to implement the RBA and RAM, "predicated upon the Commission also adopting" Blue Planet's recommendations "regarding the PIM (in particular, the technical session, subsequent briefing, and a Commission decision on the PIM)." Reply Brief of Blue Planet Foundation, filed September 29, 2009 ("Blue Planet Reply Brief") at 12.

<sup>81</sup>HECO Memo in Support at 9.

the commission were to order the establishment of the RBA, HECO target revenues would be based on a rigorously reviewed test year that is the most current possible, the 2009 test year.<sup>82</sup> As a result, the authorized rates will have been determined to be just and reasonable for both HECO and ratepayers with the commencement of decoupling as well as the monthly allocation of the target revenue, since it will be based on the test year sales forecast that has been determined by the commission to be reasonable. According to the HECO Companies, with the commission's finding that the target revenue, authorized rates and sales forecast have been reasonably determined, there should be little bias in the development of the RBA accumulated balance.<sup>83</sup>

With respect to MECO and HELCO, the merits of using the most recently authorized revenue requirements as stated above also apply. Additionally, the HECO Companies note that "if the Commission were to order the immediate establishment of the RBA and RAM for MECO and HELCO with the issuance of the interim decision and orders for their 2010 test year rate cases, as

---

<sup>82</sup>The immediate establishment of the RBA will fulfill item 1 in Section 28 of the Energy Agreement, which states, "The revenues of the utility will be fully decoupled from sales/revenues beginning with the interim decision in the 2009 Hawaiian Electric Rate Case (most likely in the summer of 2009)."

<sup>83</sup>HECO Memo in Support at 9-10.

noted by HDA, 'the sensitivity of the determination of the test year sales and demand forecasts as substantial contested issues' would be eliminated."<sup>84</sup>

#### Consumer Advocate

The Consumer Advocate adds that other advantages of the RBA are that it will make the HECO Companies indifferent to changes in future sales volumes, will stabilize the HECO Companies' revenues which will protect the companies' financial condition, and will result in less frequent rate cases.<sup>85</sup> The RBA would have the effect of stabilizing revenues for each of the HECO Companies at commission-approved levels, so that deviations in actual sales relative to test year estimates do not contribute to either over- or under-recovery of intended revenue amounts.

#### DBEDT

DBEDT states that it does not find anything objectionable to the RBA component of HECO's proposed decoupling mechanism, and maintains that:

The RBA component of the decoupling mechanism proposed in the JSOP alone could make the HECO Companies indifferent to the decreases in kilowatt-hour sales that may result from various energy initiatives and policies to achieving Hawaii's energy goals, but may not provide enough

---

<sup>84</sup>Id. at 10 (citing HDA Opening Brief at 8 n.7).

<sup>85</sup>Consumer Advocate Opening Brief 14-15.

incentive for the utilities to aggressively pursue and promote these initiatives, as the RBA simply makes them "whole" by guaranteeing recovery of their authorized revenue requirements.<sup>86</sup>

HDA, HREA, Blue Planet and HSEA

HDA's Opening Brief (in which HREA joins), acknowledged that the RBA as proposed in the Joint FSOP is superior to even its own originally proposed "formulaic" decoupling adjustment mechanism, providing "more transparency and accountability".<sup>87</sup>

HSEA joins in Blue Planet's Opening Brief, which states with respect to Issue II that "Blue Planet rests on its prior relevant submissions and statements in this proceeding . . . ."<sup>88</sup> Prior to filing its Opening Brief, Blue Planet stated that it joined in HDA's final statement of position, which "supports the revenue balancing account (RBA) decoupling mechanism proposed by the HECO Companies with some modifications."<sup>89</sup> Thus, by their various joinders, Blue Planet and HSEA appear to join HDA in its general support of the RBA.

c.

Findings

---

<sup>86</sup>DBEDT Opening Brief at 13-14.

<sup>87</sup>HDA Opening Brief at 5 n.3.

<sup>88</sup>Blue Planet Opening Brief at 10.

<sup>89</sup>Haiku Design and Analysis Final Statement of Position, dated May 11, 2009 at 4.

Based on the record in this docket, the commission finds that the proposed sales decoupling mechanism and RBA Provision define a target revenue level which is based on a rigorously reviewed test year that is the most current possible (which for HECO is the 2009 test year (Docket No. 2008-0083)), from which authorized rates will have been determined to be just and reasonable for both the HECO Companies and their ratepayers. Until the final decision and orders in those rate cases have been issued, the target revenue level will be based on the most current test year decision and order (which for HECO is the level approved in the Second Interim D&O). Should the commission find lower authorized revenue amounts to be reasonable in its final decision and orders, the differences will be subject to refund with interest.<sup>90</sup>

The RBA Provision will record (1) the difference between the utilities' target revenue and recorded revenue and (2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. The RBA Provision will also provide for recovery of the RAM Revenue Adjustment as described in the RAM Provision.

The RBA Adjustment will be filed on March 31<sup>st</sup> of each year

---

<sup>90</sup>The difference between any lower authorized base revenue amount in a final decision and order in a rate case and a higher authorized revenue amount in an interim decision and order in a rate case will be refunded through rate mechanisms in the rate case.

and will be implemented for each company as a single per-kWh RBA rate adjustment for residential and non-residential customers, which will promote simplicity of administration and smoothing of customer impacts between rate cases, and will serve as an allocation of costs that is a proxy for a revised cost-of-service study. The effective date of the RBA Adjustment will be June 1<sup>st</sup>, thereby providing an adequate amount of time for review (61 days after the March 31<sup>st</sup> filing). All affected customers will be notified of the filings via publication in newspapers of general circulation within 30 days of the filing and by notification with the HECO Companies' billing statements within 60 days after the filing has been made. The annual RBA Adjustment filing on March 31<sup>st</sup> of each year will be accompanied by the schedules and supporting documentation, the sources of which will include actual financial reports and other data used for ratemaking purposes. Thus, the commission considers the RBA Adjustment filing to be an automatic rate adjustment clause.

No party objected to the establishment of the RBA for the HECO Companies and the commission finds approval of the RBA Provision to be in the public interest for several reasons. The RBA Provision is conservative in design, simple and workable with filings and review procedures. The RBA Provision will encourage utility support for energy efficiency and renewable resources by

making the HECO Companies indifferent to changes in future utility sales volumes. By stabilizing the HECO Companies' revenues, sales decoupling will help to protect the HECO Companies' financial condition, and could result in less frequent rate cases. With the anticipated need for greater capital investments to allow the greater penetration of renewable resources, the RBA is also in the public interest to reduce the cost and burden of the more frequent rate case filings that would be required without decoupling, which consume significant resources that must also be recovered from ratepayers. Accordingly, the commission finds that the RBA Provision reasonably implements decoupling (see the commission's findings in Section II.B.1.d above), is just and reasonable, and achieves Hawaii's energy objectives.

3.

Ability of the RAM to Achieve Hawaii's Objectives

The third issue in this docket is: "Revenue Adjustment Mechanism: How Well Does it Achieve Hawaii's Objectives?"<sup>91</sup>

a.

RAM Details

The second key component of the Amended Joint Proposal is a RAM provision that would serve to replace annual rate cases

---

<sup>91</sup>Order Establishing Prehearing Procedures at 6.

with formula-driven estimates of utility revenue requirements.<sup>92</sup> Costs of utilities generally tend to rise over time, due to a combination of input price inflation and output growth. As noted above, under traditional ratemaking, sales increases between rate cases have provided the HECO Companies with opportunities to recover gradual, inflation-driven cost increases between rate cases. However, setting a fixed level of target revenues that do not change between rate cases under sales decoupling provides no ability for the HECO Companies to recover increases in utility costs associated with inflation or new infrastructure investments.<sup>93</sup>

The RAM Provision is designed to re-determine annual utility authorized base revenue levels, thus providing for conservatively quantified estimated changes in the utility's cost to provide service. If it is determined through the RAM Provision formulae that annual utility Authorized Base Revenues should be decreased or increased, then the Authorized Base Revenue level applicable within the RBA Provision will be adjusted as set forth in the RAM Provision. The RAM Revenue Adjustments implemented under the RAM Provision will therefore escalate and update the HECO Companies' approved base revenue

---

<sup>92</sup>Consumer Advocate Opening Brief at 17.

<sup>93</sup>See Joint FSOP at 11.

requirements through use of updated actual financial data and cost indices, reduced by any Earnings Sharing Revenue Credits, Major Capital Projects Credits or Baseline Capital Projects Credits to customers.<sup>94</sup>

The "Authorized Base Revenue" under the RAM will be the annual amount of revenues required for the utility to recover its estimated O&M, depreciation, amortization and tax expenses for the RAM Period, as well as the Return on Investment<sup>95</sup> on projected rate base for the RAM Period (referred to as the "Rate Base" in the RAM Provision), using the ratemaking conventions and calculations reflected within the most recent rate case decision and order issued by the commission, as quantified in the manner prescribed in the RAM Provision. The RAM Period is defined as the calendar year containing the Annual Evaluation Date (i.e., the date the utility makes its annual filing under the RAM mechanism).

The components of a company's revenue requirement that are subject to update and escalation through the RAM Provision include the revenue requirements associated with: (1) changes

---

<sup>94</sup>The role of major and baseline capital projects credits as a customer safeguard is further discussed below in Section II.B.6.c of the Decision and Order.

<sup>95</sup>As defined in the RAM Provision and further discussed herein, "Return on Investment" is the overall weighted percentage rate of return on debt and equity capital approved by the commission in the most recent rate case.

in designated labor and non-labor O&M and payroll tax expenses (referred to as "Base Expenses" in the RAM Provision); (2) the return on incremental investment in designated Rate Base components; (3) updated depreciation and amortization expenses; and (4) changes in costs due to significant changes in tax laws or tax regulations (referred to as "Exogenous Tax Changes" in the RAM Provision).<sup>96</sup>

#### Base Expenses

Base Expenses include the labor and non-labor O&M expense amounts approved by the commission in the most recent rate case where the test year was the Evaluation Period,<sup>97</sup> or alternatively, as authorized by the commission in its Tariff Order for the immediately preceding year RAM Period if the Evaluation Period is not a test year. Base Expenses do not include any fuel, purchased power, integrated resource planning ("IRP")/demand-side management ("DSM"), pension, post retirement benefits other than pensions, or clean energy/renewable energy infrastructure costs that are subject to recovery through

---

<sup>96</sup>Joint FSOP at 13.

<sup>97</sup>As defined in the RAM Provision and further discussed below, the "Evaluation Period" is the historical twelve month period ending December 31, of each calendar year preceding the Annual Evaluation Date. The Evaluation Period is used to determine achieved earnings and any sharing of such earnings above the Authorized Return on Equity, as well as the year-end recorded balances of Plant-in-Service, Accumulated Depreciation, Accumulated Deferred Income Taxes and CIAC for the beginning of the RAM Period.

separate rate tracking mechanisms.<sup>98</sup> As a result, these excluded costs will be carried forward into the RAM Period without adjustment, at the fixed amounts established in the most recent rate case proceeding, because changes in these costs are accounted for separately in other cost tracking mechanisms.<sup>99</sup>

Base Expenses will be segregated between labor and non-labor amounts, with the labor component quantified for the RAM Period by application of the Labor Cost Escalation Rate<sup>100</sup> that is reduced by the Labor Productivity Offset<sup>101</sup> and the non-labor components quantified for the RAM Period by application of the Non-labor Cost Escalation Rate.<sup>102</sup> The purpose of using these escalation rates is to track only inflation on the costs approved in the last rate case proceeding, while assuming that

---

<sup>98</sup>Joint FSOP at 14.

<sup>99</sup>Id. at 13-14.

<sup>100</sup>As further defined in the RAM Provision and discussed herein, the "Labor Cost Escalation Rate" is the applicable annual percentage general wage rate increase provided for in currently effective union labor agreements for use in escalating wage and salary Base Expenses for both union and non-union employees to determine the RAM Revenue Adjustment for each RAM Period.

<sup>101</sup>As defined in the RAM Provision and further discussed herein, the "Labor Productivity Offset" shall be fixed at 0.76% and will be subtracted from the Labor Cost Escalation Rates applicable to Base Expenses to determine the authorized RAM Revenue Adjustment for each RAM Period.

<sup>102</sup>As further defined in the RAM Provision and discussed herein, the "Non-labor Cost Escalation Rate" is the consensus estimated annual change in the Gross Domestic Product Price Index ("GDPPI") to escalate

improved management efficiency measures will serve to offset increasing wage costs. The RAM does not account for any staffing level changes (for example, costs associated with the hiring of additional employees or consultants) that are not reflected in the most recent rate case.

The labor component of Base Expenses, including payroll taxes, will be quantified for the RAM Period by application of the Labor Cost Escalation Rate, reduced to account for the productivity offset to labor expenses. The Labor Cost Escalation Rate will be the applicable annual percentage general wage rate increase provided for in currently effective International Brotherhood of Electrical Workers ("IBEW"), Local 1260 union labor agreements for use in escalating wage and salary Base Expenses for both union and non-union employees to determine revenue requirements for the RAM Period. In the event no IBEW Local 1260 union labor agreement exists for a RAM Period, the most recently effective annual percentage general wage rate increase will apply.<sup>103</sup>

The annual Labor Productivity Offset is fixed at 0.76% and will be subtracted from the Labor Cost Escalation Rate applicable to the labor components of Base Expenses to determine

---

non-labor Base Expenses to determine the RAM Revenue Adjustment for each RAM Period.

<sup>103</sup>Joint FSOP at 14.

revenue requirements for the RAM Period.<sup>104</sup> This productivity estimate for the HECO Companies was submitted in Docket No. 99-0396<sup>105</sup> and was accepted as reasonable in the Joint FSOP as a proxy for achievable productivity gains until updated studies can be performed.

The non-labor component will be quantified for the RAM Period by application of the Non-labor Cost Escalation Rate. The Non-labor Cost Escalation Rate will be the consensus estimated annual change in the GDPPI.<sup>106</sup> No productivity offset is applied to the Non-labor Cost Escalation Rate because GDPPI is a measure of national output price inflation that includes the impact of embedded productivity. The application of a further productivity offset would thus double-count the impact of productivity.<sup>107</sup>

#### Rate Base

The Rate Base (for the RAM Period) will be the average net investment estimated for the RAM Period, including each of

---

<sup>104</sup>Id.

<sup>105</sup>Application of the Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., Maui Electric Company, Limited for approval to implement performance based ratemaking in their next respective rate cases, Docket No. 99-0396, filed December 13, 1999 at 6.

<sup>106</sup>Published by the Blue Chip Economic Indicators (Aspen Publishing), issued in February of the year of the RAM filing.

<sup>107</sup>Joint FSOP at 14-15.

the elements of rate base reflected within the most recent rate case decision and order issued by the commission. The Authorized Base Revenue associated with Rate Base will be determined by multiplying the applicable Return on Investment percentage rate times the Rate Base. The Authorized Base Revenue associated with Return on Investment, as previously approved by the commission, will include related income taxes on the equity components and related revenue taxes on all components of such return. The quantification of Rate Base is specified in greater detail in § 2(f) of the RAM Provision. In effect, the average rate base for the RAM Period (i.e., the Rate Base) will be the same rate base for the previous rate case test year, with adjustments for changes to update only four major components of the rate base, including (1) average plant-in-service, (2) depreciation reserve (i.e., "Accumulated Depreciation"), (3) accumulated CIAC and (4) ADIT. All other components of the rate base will remain the same as those approved in the preceding rate case test year rate base.<sup>108</sup>

The average plant-in-service amount will be equal to the average of (1) the actual, recorded plant-in-service balance as of the end of the year prior to the RAM Period (termed the "Evaluation Year") limited to cost levels approved by the

---

<sup>108</sup>Id. at 15-16.

commission, and (2) the same Evaluation Year year-end balance plus estimated plant additions for the RAM Period. Estimated plant additions for the RAM Period will be set at the sum of Baseline Capital Project plant additions plus Major Capital Project plant additions estimated to be in service by September 30<sup>th</sup> of the RAM Period.<sup>109</sup>

Baseline Capital Projects include the total amounts of capital investment completed and closed to Plant-in-service, excluding amounts related to Major Capital Projects. Baseline Capital Project plant additions for the RAM year will be calculated based on the simple average of Baseline Capital Projects plant additions recorded in the immediately preceding five calendar years.<sup>110</sup> There is no inflation factor applied to restate the amount for the current RAM period, resulting in a fairly conservative estimate of Baseline Capital Project plant additions.

Major Capital Projects include capital investment projects that require application and commission approval to commit funds pursuant to Decision and Order No. 21002, filed May 27, 2004 in Docket No. 03-0257 ("D&O 21002") "For Exemption From and Modification of General Order No. 7, Paragraph 2.3 (g),

---

<sup>109</sup>Id. at 16.

<sup>110</sup>Id. at 16.

Relating to Capital Improvements.”<sup>111</sup> However, if specific Major Capital Projects are to be included in the Clean Energy Infrastructure Surcharge, they will not be included within the RAM Provision, so as to avoid any double recoveries.<sup>112</sup> For purposes of calculating the Rate Base for the RAM, the costs of Major Capital Projects are limited to those amounts most recently approved, e.g., when authorized in the commission’s decision approving the HECO Companies’ application in compliance with General Order No. 7 or in an interim or final decision and order issued by the commission in the HECO Companies’ rate cases.<sup>113</sup>

Accumulated Depreciation at December 31<sup>st</sup> of the RAM Period is quantified by increasing the recorded balances at December 31<sup>st</sup> of the Evaluation Period by the RAM Period depreciation and amortization expense amount.

---

<sup>111</sup>D&O 21002 revised Paragraph 2.3(g)(2) of General Order No. 7 to read “Proposed capital expenditures for any single project related to plant replacement, expansion or modernization in excess of \$2,500,000 excluding customer contributions, or 10 per cent of the total plant in service, whichever is less, shall be submitted to the Commission for review at least 60 days prior to the commencement of construction or commitment for expenditure, whichever is earlier.”

<sup>112</sup>Joint FSOP at 16.

<sup>113</sup>In the case of HECO’s East Oahu Transmission Project (“EOTP”) that is planned to be placed into service in 2010, it also was noted in the Companies’ Revenue Decoupling Proposal, filed January 30, 2009 at 27 n.12, that pre-2003 planning costs (and the related Allowance for Funds Used During Construction) would not be included in the rate base RAM beginning of year balance, as a result of the October 28, 2005 stipulation between HECO and the Consumer Advocate reached in the EOTP proceeding, Docket No. 03-0417. This agreement is now part of the Amended Joint Proposal.

CIAC is quantified by adding to the recorded balance at December 31<sup>st</sup> of the Evaluation Period an estimate of the net change in CIAC for the RAM Period. The net change will be based on (1) a simple average of cash and in-kind CIAC for Baseline Capital Projects for the immediately preceding five calendar years, and (2) specific engineering estimates of any contributions for the Major Capital Projects that are added to rate base during the RAM Period, less (3) an estimate of the amortization of CIAC for the RAM Period.<sup>114</sup>

ADIT is quantified by adding to the recorded balances at December 31<sup>st</sup> of the Evaluation Period the estimated tax effect of the depreciation timing difference (i.e., difference between book depreciation and tax depreciation) on the Baseline Capital Projects estimated to be added to rate base during the RAM Period and on the Major Capital Projects estimated to be added to rate base by September 30<sup>th</sup> of the RAM Period.<sup>115</sup>

#### Depreciation and Amortization Expenses

Depreciation and amortization expenses will be quantified for the RAM Period by application of commission-approved accrual rates to the actual recorded and RAM Rate Base-includable Plant-in-service (or other applicable) and CIAC

---

<sup>114</sup>Joint FSOP at 17; June 25 2009 Exhibits, Exhibit C, Attachment 6 at 2.

<sup>115</sup>Id.

balances at the end of the Evaluation Period.<sup>116</sup>

#### Exogenous Tax Changes

Exogenous Tax Changes will only be recognized for changes in tax laws or tax regulations that are estimated to impact Authorized Base Revenues by \$2,000,000 or more for HECO, or \$500,000 or more for HELCO or MECO.<sup>117</sup>

#### Major Capital Projects Credits

Major Capital Projects Credits are amounts that will be returned to customers as credits through the RBA for the preceding years' authorized base revenue amounts (including interest at the rate described in the RBA Provision) associated with specific major projects that were ultimately not placed into service within the first nine months of the preceding RAM period or if the commission ultimately disallows any Major Capital Project costs in a subsequent review. One purpose of these credits is to ensure that ratepayers are not paying for capital projects that have not been placed into service within the cutoff period ending September 30<sup>th</sup> of the RAM period.

Also, questions were raised during this proceeding's panel hearings regarding the use of actual plant balances for the beginning of year balances in the RAM, since there would be

---

<sup>116</sup>Id.

<sup>117</sup>Id.

no completed review of the reasonableness of cost overruns in the case of Major Capital Projects, or project costs in the case of Baseline Capital Projects.<sup>118</sup> Additionally, because the commission's review of Major Capital Projects may not occur until the rate case after such capital projects are included in one or more RAM Revenue Adjustment filings, customers will be refunded (with interest) any prior collection of RAM amounts associated with Major Capital Projects costs that the commission may subsequently disallow for rate recovery. This ensures that only authorized amounts for Major Capital Projects are paid for by ratepayers.<sup>119</sup>

#### Baseline Capital Projects Credits

Similar to Major Capital Projects Credits, Baseline Capital Projects Credits are amounts that will be returned to customers as credits through the RBA for the preceding year's authorized base revenue amounts (including interest at the rate described in the RBA Provision) associated with specific

---

<sup>118</sup>See Tr. Vol. II at 311-29, 494-99 (Hempling, Hee, Lee, Young, Kondo, Carver, Brosch); Tr. Vol. III at 530-35 (Kondo, Hee).

<sup>119</sup>The Major Capital Projects Credits provision to address future commission disallowances in the RAM Provision tariff was reflected in the July 13, 2009 Responses. Although this agreement for the Major Capital Projects Credits was reflected in the June 25, 2009 Exhibits, filed jointly by the HECO Companies and the Consumer Advocate, it had inadvertently been overlooked for inclusion in the RAM tariff previously.

Baseline Capital Project costs that are disallowed by the commission in a subsequent rate case. This credit will apply if any plant cost disallowance ordered by the commission reduces actual Baseline Capital Projects costs below the Baseline Capital Projects Plant in Service cost level included in RAM Rate Base. Thus, the Baseline Capital Projects Credit may reflect the impact for multiple RAM Periods of the disallowance ordered by the commission on the calculation of the simple historical five-year average of Baseline Capital Projects cost estimates and/or the disallowance impact upon recorded Plant in Service balances. . Because the commission's review of Baseline Capital Projects may not occur until the rate case after such Baseline Capital Projects are included in one or more RAM Revenue Adjustment filings, Baseline Capital Projects Credits will be used to refund to customers any prior collection (i.e., Return on Investment on rate base and depreciation, plus interest) relating to the amount of Baseline Capital Projects costs that the commission subsequently disallows for cost recovery.<sup>120</sup>

#### Earnings Sharing

---

<sup>120</sup>The Baseline Capital Projects Credit was initially proposed on page 97 of the HECO Opening Brief and on pages 11-12 of the HECO Memo in Support. On pages 5-6 of the Consumer Advocate Comments, the Consumer Advocate concurred in the modification of the Joint FSOP by including the Baseline Capital Projects Credit and urged its inclusion in this Decision and Order.

Earnings Sharing Revenue Credits will be the amounts to be returned to customers as credits through the RBA Provision, so as to implement the earnings sharing provision percentages and procedures described in the RAM Provision.<sup>121</sup> The purpose of earnings sharing is to ensure that the total amount of revenues being recovered through base rates, RBA/RAM adjustments and other surcharges does not contribute to excessive earnings by the utility, while retaining some incentive for management to seek cost reductions and productivity gains beyond what are recognized within the RAM formulas.<sup>122</sup>

As part of its annual filing, the HECO Companies will prepare a calculation comparing the achieved return on average common equity for the Evaluation Period for purposes of this earnings sharing mechanism to the following earnings sharing grid, so as to determine any Earnings Sharing Revenue Credit that should be recorded against the RBA to effect the prescribed sharing of utility earnings above authorized levels:<sup>123</sup>

---

<sup>121</sup>Joint FSOP at 18.

<sup>122</sup>The role of earnings sharing as a customer safeguard is further discussed below in Section II.B.6.b of this Decision and Order.

<sup>123</sup>Id.

Return on Equity ("ROE") at or below the Authorized ROE	Retained entirely by shareholders – no customer credits
First 100 basis points (one percent) over Authorized ROE	25% share credit to customers
Next 200 basis points (one to three percent) over Authorized ROE	50% share credit to customers
ROE exceeding 300 basis points (three percent) over Authorized ROE	90% share credit to customers

The Authorized Return on Equity<sup>124</sup> for this purpose will be the percentage rate of return on equity capital approved by the commission in each respective company's most recently implemented rate case order. The proposed earnings sharing grid is asymmetrical, with no surcharges to customers if achieved ROE is below the authorized level.<sup>125</sup>

Earnings (as measured by ROE) achieved by each of the HECO Companies are to be calculated on a regulatory basis of accounting for each calendar year that includes any RBA surcharge revenue.<sup>126</sup> Ratepayers would then be credited with the

---

<sup>124</sup>As defined in the RAM Provision and further discussed below, the "Authorized Return on Equity" is the overall weighted percentage rate of return on equity capital approved by the commission in the most recent rate case.

<sup>125</sup>Joint FSOP at 19.

<sup>126</sup>Since RBA accounting was not implemented by HECO until 2010, the initial RBA filing will not include earnings sharing calculations, but the subsequent filing with a 2010 Evaluation Period will include earnings sharing calculations. Reported HECO earnings in 2009 were not impacted by decoupling.

revenue equivalent of ROE levels actually achieved within the sharing layers (after removal of any prior period RBA adjustments and routinely disallowed costs).<sup>127</sup>

To determine achieved ROE for purposes of Earnings Sharing Revenue Credits, ratemaking adjustments will be made for recorded types of expenses that are removed in a company's rate filings as well as all commission-ordered expense disallowances. Rate base elements and methodologies are defined by the most recent rate case, but will be updated to reflect current average investment balances for the year. Capital ratios and costs rates will be retained as authorized in either the most recently issued rate case interim or final decision, and synchronized interest will be updated using methods employed in that last rate case for purposes of the earnings sharing mechanism.<sup>128</sup>

Detailed supporting workpapers and electronic files will be submitted coincident with all filings made by the utilities. Any recorded revenues arising from out-of-period adjustments or prior year earnings credits will be identified and removed in preparing earnings sharing calculations. The earnings monitoring and sharing report will be accompanied by detailed supporting workpapers, showing the quantification of

---

<sup>127</sup>Joint FSOP at 19.

<sup>128</sup>See id.

achieved earnings and each ratemaking adjustment embedded therein.<sup>129</sup>

#### Notice of RAM Filing

As described above, notice of the annual Rate Adjustment Mechanism<sup>130</sup> filing will be provided to all affected customers of the utility by publication in the newspapers of general circulation within 30 days and by including notification with its billing statements within 60 days after the company makes its annual filing pursuant to the RAM Provision. The notice to customers will include the following information:

- (a) A description of the proposed revision of revenues and Earnings Sharing Revenue Credits;
- (b) The effect of the proposed RAM Revenue Adjustment on the rates applicable to each customer class and on the typical bill for residential customers; and
- (c) The company's address, telephone number and website where information concerning the proposed RAM Revenue Adjustment may be obtained.<sup>131</sup>

b.

#### Positions of the Parties

---

<sup>129</sup>Joint FSOP at 19.

<sup>130</sup>The "Rate Adjustment Mechanism" is described in the RBA Provision.

<sup>131</sup>RAM Provision at 9-10.

### HECO Companies

The HECO Companies contend that the RAM Provision is an essential element of decoupling, because RBA accounting alone will not provide any opportunity for recovery of inflation-driven cost increases and continuing infrastructure investment between rate cases. According to the HECO Companies:

The immediate need for the RAM is driven by the increase in these costs related to the many initiatives in the HCEI Agreement, normal input price and output growth, and to maintaining and improving service reliability with an aging infrastructure while the HECO Companies transition to incorporate more renewable energy resources into their grids and concurrently transform them into smart grids.<sup>132</sup>

The HECO Companies note that "[r]evenue adjustment mechanisms are almost always included in decoupling true-up plans,"<sup>133</sup> and state that:

Decoupling also should reduce the frequency of rate cases. With decoupling (provided the mechanism includes both a sales decoupling and a compensatory revenue adjustment mechanism), a three-year rate case cycle is expected to be workable. Without decoupling, it has been assumed that a two-year rate case cycle would be required, but it is entirely possible that rate cases would be required in some instances even more frequently.<sup>134</sup>

### Consumer Advocate

---

<sup>132</sup>HECO Opening Brief at 11.

<sup>133</sup>Id. at 10-11.

<sup>134</sup>Id. at 4.

In its Opening Brief, the Consumer Advocate states that “[t]he RAM provision is needed in addition to the RBA, because the RBA will serve only to hold utility margin revenues constant between rate cases, providing no opportunity for recovery of any increasing costs to provide service.”<sup>135</sup> Without a RAM, increasing cost levels in a fixed revenue environment would force the utilities to file frequent formal rate cases. The Consumer Advocate maintains that the RAM provision simplifies the inherently complicated formal rate case process by:

- 1) Starting with PUC-approved expense levels from the latest rate case decision,
- 2) Utilizing available recorded plant investment balances and Commission-approved accrual rates in place of forecasts for calculation of depreciation/amortization expenses and to determine the front “half” of the average rate base,
- 3) Updating only the largest four elements of rate base; Plant-in-Service, Accumulated Depreciation, Accumulated Deferred Income Taxes, and Contributions in Aid of Construction,
- 4) Utilizing only two expense escalation indices from published third party sources for all labor and non-labor O&M expenses, and
- 5) Holding the authorized rate of return constant at the Commission-approved level.<sup>136</sup>

---

<sup>135</sup>Consumer Advocate Opening Brief at 17.

<sup>136</sup>Id. at 18.

The Consumer Advocate also notes that the RAM provision is conservative, in that:

- 1) Labor expenses that are escalated by the percentage increases documented within each Company's union wage agreements, even if actual non-union wage increases are higher or include incentive compensation pay.
- 2) Escalated wage expenses are then reduced by an assumed labor productivity offset of 0.76 percent. This productivity offset forces the HECO Companies to find new technologies or business processes that enable it to do more work with fewer employees or reduced overtime hours in order to fully recover its future labor expenses.
- 3) Non-labor expenses are escalated by the published Gross Domestic Product Price Index ("GDPPI"), which is reflective of national finished goods price trends rather than Hawaii inflation and that captures productivity gains achieved in the broader economy.
- 4) Only the four largest components of rate base are updated. Changes for Plant-in-Service growth are limited to average historical baseline plant additions (that are both easily verifiable and without escalation of prices) plus major projects that are completed by September 30 (limited to PUC approved total estimated costs).<sup>137</sup>

In addition, the Consumer Advocate states that "[a]voidance of regulatory lag and costs can be expected to improve the financial condition of the HECO Companies, thereby

---

<sup>137</sup>Id. at 19-20.

assisting in their ability to perform the many undertakings expected of them within the HCEI Agreement.”<sup>138</sup>

DBEDT

DBEDT does not appear to oppose the general RAM concept. As part of its discussion of this issue, DBEDT’s Opening Brief recognizes that:

[A]nother barrier to the utility aggressively promoting and accelerating energy efficiency and adding new renewable energy resources to help achieve Hawaii’s energy goals is the regulatory lag inherent in the traditional ratemaking framework. Under the current framework, increases in a utility’s costs of providing service in between rate cases are not recovered in its current rates, and this affects the utility’s ability to earn a fair return on investment, especially in periods of decreasing sales trends.<sup>139</sup>

In addition, DBEDT’s Reply Brief states that “DBEDT applauds and supports the HECO Companies’ proposed changes to the RAM component of the joint decoupling proposal as reasonable and prudent . . . .” Moreover, on December 3, 2009, DBEDT filed a “Memorandum in Support” of the HECO Companies’ Interim Motion (which contemplated interim implementation of a RAM and an interim performance metric for HECO).<sup>140</sup>

---

<sup>138</sup>Id. at 21.

<sup>139</sup>DBEDT Opening Brief at 14.

<sup>140</sup>See The Department of Business, Economic Development, and Tourism’s Memorandum in Support of the Motion for Interim Approval of a Decoupling Mechanism for Hawaiian Electric Company, Inc., Hawaii

On the other hand, it does not appear from the record that DBEDT has ever expressly supported the RAM mechanism as specifically agreed upon in the Amended Joint Proposal (i.e., without a performance metric). For example, DBEDT's statements regarding the RAM have generally been made in connection with recommendations for additional consumer safeguards, clean energy performance metrics, reliability standards and modifications to the ECAC. DBEDT's recommendations regarding these issues are further discussed below in Sections II.B.5 and II.B.6 of this Decision and Order.

In addition to the recommendations above, DBEDT's Opening Brief proposes to exclude all labor cost increases from the O&M expense component of the RAM, arguing that:

[T]he HECO Companies' O&M labor expense should be maintained at the approved level in the utility's last rate case in the determination of the RAM revenue requirements adjustment. A guaranteed pass-through of labor cost increases at the current contractual wage rate increase as proposed in the HECO/CA Joint Proposal could very likely eliminate the utilities' incentive to prudently manage their labor costs through the contract negotiations with the union.<sup>141</sup>

In reply to DBEDT's O&M recommendation, the HECO Companies note that: (1) labor costs in the O&M expense RAM are

---

Electric Light Company, Inc., and Maui Electric Company, Limited, filed December 3, 2009 ("DBEDT Memo in Support").

<sup>141</sup>DBEDT Opening Brief at 30.

very conservatively estimated; (2) the HECO Companies do not automatically pass through HECO's current contractual labor wage increase, as DBEDT claims; (3) the benefit to the HECO Companies' financial integrity of allowing some RAM recovery for labor cost increases would be significantly greater than the cost to ratepayers; and (4) the O&M expense RAM calculation does not factor in "growth" in the number of employees hired between rate cases, which may be substantial, so the additional O&M labor expenses associated with the new hires are not passed on to ratepayers.<sup>142</sup>

DBEDT further recommends that the commission consider including certain additional "consumer safeguards" in the RAM, such as: (1) imposing caps on total rate increases between rate cases; (2) imposing maximum bounds on cost increases tied to the GDDPI or other cost indices; (3) imposing percentage caps on RAM adjustments for baseline and major capital projects; and (4) excluding or limiting RAM adjustments for certain specific Major Capital Projects.<sup>143</sup>

In response, the HECO Companies maintain that DBEDT's proposals: (1) "are just meant to reduce the RAM as calculated by the Companies' and Consumer Advocate's proposed RAM

---

<sup>142</sup>See HECO Reply Brief at 45-46.

<sup>143</sup>DBEDT Opening Brief at 18-19.

methodologies”; (2) imply that the commission should arbitrarily establish caps, while offering no proposals on what the caps should be or how they should be determined; and (3) are based in part on DBEDT’s misinterpretation of the Amended Joint Proposal’s method for determining the rate base RAM.<sup>144</sup>

#### HDA and HREA

HDA’s Opening Brief (in which HREA joins) states that “although the proposed RAM may have merit . . . , it has not been clearly established that the RAM is a necessary measure to provide HECO with just and reasonable rates on an ongoing basis.”<sup>145</sup> Nonetheless, HDA acknowledges that the proposed RAM could serve to improve “regulatory efficiency” by, among other things, reducing the frequency of rate cases and improving the utilities’ financial condition.<sup>146</sup> In addition, HDA makes a number of recommendations in connection with the RAM concerning the continuation of this docket, the review process for the RAM and what safeguards should be considered in connection with the RAM. HDA’s positions on those issues are further discussed below in Section II.B.6 of this Decision and Order.

---

<sup>144</sup>See HECO Reply Brief at 43.

<sup>145</sup>HDA Opening Brief at 16 (emphasis in original).

<sup>146</sup>Id. at 19.

On December 2, 2009, HDA filed a "Memorandum in Response" to the HECO Companies' Interim Motion, in which HDA stated that it "does not oppose HECO's Motion," but emphasized that "HDA's position is different than what is proposed in HECO's Motion."<sup>147</sup>

Blue Planet and HSEA

Blue Planet's Opening Brief (in which HSEA joins) and Reply Brief state with respect to the RAM that, "In general, Blue Planet supports adoption of the Joint Decoupling Proposal," subject to certain "comments concerning RAM calculation, customer class allocation, and return on equity."<sup>148</sup> On December 3, 2009, Blue Planet filed a "Memorandum in Partial Opposition" to the HECO Companies' Interim Motion<sup>149</sup> (in which HREA and HSEA join),<sup>150</sup> wherein Blue Planet states that it "does not oppose the

---

<sup>147</sup>Haiku Design and Analysis Memorandum in Response To: Motion for Interim Approval of a Decoupling Mechanism for Hawaiian Electric Company, Inc., Hawaiian Electric Light Company, Inc., and Maui Electric Company, Limited and Memorandum in Support of Motion, filed December 2, 2009 ("HDA Memo in Response").

<sup>148</sup>Blue Planet Opening Brief at 10; Blue Planet Reply Brief at 3.

<sup>149</sup>Memorandum in Partial Opposition to Motion for Interim Approval of a Decoupling Mechanism for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Ltd. Filed November 25, 2009, filed December 3, 2009 ("Blue Planet Memo in Partial Opposition").

<sup>150</sup>See Hawaii Renewable Energy Alliance's Joinder to Blue Planet Foundation's Memorandum in Partial Opposition to Motion for Interim Approval of a Decoupling Mechanism for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Ltd. Filed November 25, 2009, filed December 3, 2009 ("HREA Joinder to

Motion's request for approval of the HECO RAM in general.

Rather, Blue Planet opposes the Motion's request only insofar as it proposes that the Commission make no further decision on the HECO RAM in this proceeding . . . ." Blue Planet's comments on the RAM and partial opposition the HECO Companies' Interim Motion are further discussed below in Section II.B.6 of this Decision and Order.

c.

#### Findings

Based on the record in this docket, the commission finds that the RAM provision included in the Amended Joint Proposal will provide the HECO Companies with a reasonable opportunity for recovery between rate cases of conservatively estimated increasing operating expenses, as well as depreciation, return and taxes for new infrastructure investment. The commission finds that the RAM Provision will result in just and reasonable rates, while simplifying the ratemaking process by reducing the number of rate cases filed by the HECO Companies.

The methodologies within the RAM were carefully

---

Blue Planet Memo"); Hawaii Solar Energy Association's Joinder to Blue Planet Foundation's Memorandum in Partial Opposition to Motion for Interim Approval of a Decoupling Mechanism for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Ltd. Filed November 25, 2009, filed December 3, 2009 ("HSEA Joinder to Blue Planet Memo").

designed to conservatively estimate changes in revenue requirement between test years. RAM expense calculations start with operating expense amounts that have already been found reasonable by the commission, then escalate such amounts by factors that require continuing labor productivity gains and constrained non-labor spending within GDPPI limitations. RAM rate base changes start with recorded actual net investment values and are subject to continuing regulatory review and refund if later found to be unreasonable. The RAM calculations are intended to function between rate cases on a three-year cycle, but will be subject to early review and any needed modification within the anticipated HECO 2011 test year rate case, at which time any revisions to these parameters can be considered.

In addition, the commission finds that the proposed RAM should help to reduce regulatory lag, while at the same time helping to support the HECO Companies' financial integrity. Implementation of the RAM will enable management attention and resources otherwise directed towards traditional rate case activities to be redirected toward the operational and regulatory initiatives required to achieve Hawaii's clean energy future.

Moreover, the commission finds that the incorporation

into the RAM of consumer protection features such as an earnings sharing mechanism and capital projects credits should strike an appropriate balance between the interests of consumers and the need to support the HECO Companies' financial integrity.

With respect to the "caps" and other limitations on the RAM that DBEDT proposed as additional "consumer safeguards" on pages 18 through 19 of its Opening Brief, the commission finds that DBEDT has not created a sufficiently detailed record in this docket to support those recommendations, and thus declines to adopt them. The insertion of the proposed caps or performance conditions into the RAM may produce unexpected financial outcomes that are not consistent with the goals stated herein for decoupling (namely the preservation of the utilities' financial integrity and avoidance of back-to-back rate cases).

The commission further finds that implementation of the proposed RAM will help to promote the implementation of energy efficiency, renewable energy and other clean energy measures. Accordingly, the commission finds that the RAM provision, as included in the Amended Joint Proposal will contribute to the achievement of Hawaii's objectives.

#### 4.

#### Ability of RAM Alternatives to Achieve Hawaii Objectives

The fourth issue in this docket is: "Revenue Per

Customer Mechanism and Other Alternatives: How Well Do They Achieve Hawaii's Objectives?"<sup>151</sup>

The various alternatives to the RAM that were addressed in this docket are discussed below.

a.

Revenue Per Customer and Other Alternatives

NRRI Scoping Paper

The NRRI Scoping Paper describes four basic approaches to decoupling: (1) Lost earnings tracker, (2) Total sales adjustment, (3) Sales-per-customer adjustment, and (4) Straight fixed-variable ("SFV") rate design.<sup>152</sup>

The Total sales adjustment is the consensus approach of the Energy Agreement parties.<sup>153</sup>

The Lost earnings tracker is similar to the lost margin mechanism that HECO had previously implemented for its DSM programs, but has since been terminated by the commission by Order No. 22420, issued April 26, 2006 in Docket No. 05-0069. This approach would require determination of the earnings impact of changes in sales volumes that is inherently more complex than the tracking of revenue changes under the total sales adjustment

---

<sup>151</sup>Order Establishing Hearing Procedures at 6.

<sup>152</sup>See Scoping Paper at 10-20.

<sup>153</sup>Division of Consumer Advocacy's Comments on the National Regulatory Research Institute Paper, filed February 10, 2009 at 2-3.

approach used in the RBA provision. In their responses to the Scoping Paper's Appendix 2, questions 2, 5 and 6, the HECO Companies stated that decoupling is not designed to recover lost earnings resulting from energy efficiency. Instead, the Amended Joint Proposal is designed to achieve the following objectives: (1) eliminate the disincentives to the HECO Companies to support energy efficiency programs and customer-sited distributed generation; (2) maintain a financially sound utility that that has the financial capacity to maintain and invest in its infrastructure to accommodate increased renewable energy resources; and (3) maintain the utility's financial integrity and serve as a credit worthy off-taker of the planned renewable energy projects. The Amended Joint Proposal is not designed to specifically recover the lost earnings related to energy efficiency, but is designed to restore the utilities' cost of service revenue requirements in order to maintain their financial integrity, enabling them to undertake the commitments made under the Energy Agreement.<sup>154</sup>

In the Parties' final statements of position, no party to this proceeding advocated utilization of the lost earnings tracker mechanism.

---

<sup>154</sup>HECO Companies responses to NRRI Scoping Paper, Appendix 2 Questions, Question #2 at 2, Question #5 at 2, and Question #6 at 1, filed February 20, 2009.

As noted by the HECO Companies, although SFV rate design was discussed extensively in the NRRI Scoping Paper, it has been implemented in only five states, for their gas utilities: North Dakota, Georgia, Oklahoma, Missouri and Ohio. NRRI also acknowledged that the two biggest criticisms of the SFV approach to decoupling are that it (1) encourages consumption and (2) raises bills for small volume customers.<sup>155</sup> No party to this proceeding advocated utilization of the SFV rate design methodology to accomplish decoupling.

The Sales-per-customer adjustment is similar to the Revenue per Customer ("RPC") approach and is further discussed below.

#### HDA Proposed Mechanisms

HDA initially proposed a "fixed charge per customer" earnings decoupling mechanism in its response to NRRI Scoping Paper, Appendix Question 2. This approach allows test year fixed cost recoveries to grow in proportion with utility system growth using an index of the number of new customers as a proxy for utility system growth between rate cases.<sup>156</sup> HDA withdrew the "fixed charge per customer" earnings decoupling mechanism,

---

<sup>155</sup>HECO Companies' Comments on the National Regulatory Research Institute Paper, filed February 10, 2009, Attachment 1 at 2.

<sup>156</sup>Haiku Design and Analysis Responses to the National Regulatory Research Institute Paper Appendix 2 Questions for the Parties with Attachments 1, 2 and 3, filed February 19, 2009 at 4.

stating that this approach is not correct because it is not consistent with the HECO Companies' ECAC reconciliation mechanism, and proposed a "revenue per customer" approach to "recoupling" as an alternative to the HECO Companies' proposed RAM.<sup>157</sup>

RPC Mechanism (Sales Revenue-per-Customer Adjustment)

As proposed by HDA, the RPC mechanism would allow recovered target revenues to grow in the years between rate cases in proportion with an index of the number of customers.<sup>158</sup> However, as noted by the HECO Companies, HDA did not take the position that the RPC mechanism should be adopted instead of the RAM.<sup>159</sup> As described by HDA's representative in its closing statement, its intent was to offer a "vanilla" alternative to the RAM in the form of an RPC mechanism, which was not intended to address financial integrity issues such as regulatory lag.<sup>160</sup>

The HECO Companies addressed the reasons why the RAM is preferable to an RPC mechanism in a report entitled "Revenue

---

<sup>157</sup>Haiku Design and Analysis Final Statement of Position, filed May 11, 2009 at 3, 5. (Blue Planet filed a joinder to HDA's Final Statement of Position on May 11, 2009.)

<sup>158</sup>HDA Opening Brief at 23.

<sup>159</sup>HECO Reply Brief at 20.

<sup>160</sup>See Tr. Vol. III at 723 (Freedman).

Decoupling for Hawaiian Electric Companies",<sup>161</sup> in their comments on the Scoping Paper,<sup>162</sup> in their Initial Statement of Position on HDA's Decoupling Proposal,<sup>163</sup> and in their responses to IRs, as summarized in the HECO Companies' Reply Brief.<sup>164</sup>

According to the HECO Companies, the RPC mechanism proposed by HDA does not attempt to address the objectives of the RAM to partially recover, between rate cases, the increases in costs that are fixed in the short term due to inflation, changes in utility output, and investments in utility infrastructure and, thus, to help maintain the financial health and integrity of the utility.<sup>165</sup> The HECO Companies note that:

RPC mechanisms are commonly employed by natural gas local distribution utilities (LDCs), where a large portion of fixed costs are tied directly to, and vary with the number of customers. The HECO Companies' fixed costs are not related to the number of customers. Thus, as a means to help ensure that the Companies remain financially healthy between rate cases, the RPC methodology will not perform nearly as well as the RAM.

To avoid financial attrition, utilities operating

---

<sup>161</sup>Dr. Mark Lowry, Revenue Decoupling for Hawaiian Electric Companies ("PEG Report"), Pacific Economics Group, LLC ("PEG"), filed February 3, 2009.

<sup>162</sup>HECO Companies' Comments on the National Regulatory Research Institute Paper, filed February 10, 2009.

<sup>163</sup>HECO Initial Statement of Position on Haiku Design and Analysis' Decoupling Proposal, filed March 30, 2009.

<sup>164</sup>See HECO Reply Brief at 17-21 and Exhibit A thereto.

<sup>165</sup>Id. at 20.

under RPC freezes file rate cases more frequently. This raises regulatory cost and can compromise utility cost performance. A RAM that provides relief for inflation as well as customer and activity growth makes it possible to simultaneously reduce regulatory cost and improve utility performance. That is why most RAMs that have been implemented in the U.S. and other countries over the years have not employed a RPC freeze.<sup>166</sup>

None of the Parties' opening briefs, reply briefs or responses to the HECO Companies' Interim Motion appear to argue that the RPC is a superior alternative to the RAM. Even HDA's Opening Brief (in which HREA joins) states that "the HDA RPC mechanism should be approved as a reasonable mechanism to serve in lieu of the RAM if the RAM is not approved or is suspended for any reason and the Commission decides to continue a decoupling mechanism[.]"<sup>167</sup>

The Consumer Advocate also does not support the RPC, and states in its Opening Brief that:

The premise behind RPC is flawed. The revenue requirement of the HECO Companies is driven by many factors, only one of which is the modest direct cost incurred to connect a new customer. HDA has made no showing that RPC can be expected to produce reasonable results when applied to the HECO Companies or that the fundamental cost basis

---

<sup>166</sup>HECO Reply Brief at 20-21.

<sup>167</sup>HDA Opening Brief at 9 (emphasis added). Notwithstanding HREA's joinder to HDA's Opening Brief, HREA notes that "HDA's approach appears to be simpler and easier to implement. It is also similar to the approach being implemented in Idaho Power Company's decoupling mechanism." HREA Joinder at 1.

for the method is defensible. In fact, Mr. Freedman admitted in the hearing that, "I think it's true that the RPC methodology does not track fixed costs as well as the RAM mechanism." (Tr.448)

DBEDT points out that although RPC may be an effective mechanism for a utility with an increasing customer base, the RPC method may not provide adequate rate relief where the increases in costs are far greater than the increases in customers, or where the customer base is decreasing.<sup>168</sup> In situations where the increases in costs are far greater and increasing at a faster rate than the increases in the number of customers, or where the customer base is decreasing rather than increasing, the RPC method may not provide enough rate relief to recover the increase in the utility's costs.<sup>169</sup>

Blue Planet's Opening Brief (in which HSEA joins) states that "[i]ncorporating a RPC, either with or without reset, with any RAM may result in double recovery of certain revenue requirement items. In practice, it may be difficult to measure the exact amount of any such double recovery and reduce the RAM rate increase by a corresponding amount."<sup>170</sup>

During the panel hearing, RPC mechanisms were discussed at length by the Parties. The discussion also considered the

---

<sup>168</sup>DBEDT Opening Brief at 36.

<sup>169</sup>See id. at 36.

<sup>170</sup>Blue Planet Opening Brief at 16.

feasibility of providing a RPC mechanism plus "something" as an alternative to the Amended Joint Proposal to address: (1) the anticipated revenue shortage due to the HECO Companies' commitments in the Energy Agreement; and (2) keeping the HECO Companies relatively strong financially.<sup>171</sup> That "something" was RPC plus rate cases.<sup>172</sup>

In response, HDA stated that RPC plus rate cases still does not solve the problem of regulatory lag.<sup>173</sup> The HECO Companies highlighted the regulatory costs savings with the Amended Joint Proposal versus the RPC mechanism with rate cases.<sup>174</sup> The Consumer Advocate also stated that the cost associated with multiple rate cases would take its toll on applicable stakeholders, such as the commission and Consumer Advocate, and that the resulting regulatory lag would adversely affect the successful achievement of Hawaii's HCEI objectives. Considerable effort was devoted to the development of a simple and administratively workable RAM to meet this goal and HDA

---

<sup>171</sup>See Tr. Vol. II at 442 (Hempling).

<sup>172</sup>See id. at 445 (Hempling).

<sup>173</sup>See id. at 446-47 (Freedman).

<sup>174</sup>See id. at 479-80 (Lowry); see also Attachment 1 to the HECO Companies' response to PUC-IR-23, filed March 30, 2009, which provides recorded historical costs as of March 24, 2009 for HECO's 2005 and 2007 test year rate cases (\$2.148 million and \$1.970 million, respectively), HELCO's 2006 test year rate case (\$2.323 million) and MECO's 2007 test year rate case (\$1.531 million).

offered no rebuttal or criticism of the RAM.<sup>175</sup>

#### HREA Proposed Mechanism

HREA noted that it was evaluating an alternative decoupling mechanism based on the Idaho Fixed Cost Adjustment Decoupling Mechanism Model ("Idaho Model"), also referred to as a "true-up mechanism" by Idaho Power.<sup>176</sup> HREA subsequently withdrew the Idaho Model from consideration in its Initial Statement of Position.<sup>177</sup>

b.

#### RAM Variants

As detailed above, the Amended Joint Proposal utilizes a hybrid RAM (i.e., the methodology to calculate the change in O&M expenses is formulaic and differs from the forecast methodology that is used to calculate the change in rate base). The RAM proposal is a "hybrid" because of the way it combines and balances the most desirable elements of revenue requirement estimation without rigidly applying a single method to all types of cost changes. According to the HECO Companies, there are a number of advantages to employing

---

<sup>175</sup>Consumer Advocate Opening Brief at 24.

<sup>176</sup>Hawaii Renewable Energy Alliance Response to the Appendix 2 Questions of the National Regulatory Research Institute Scoping Paper on Decoupling, filed February 20, 2009 at 4.

<sup>177</sup>See Hawaii Renewable Energy Alliance Initial Statement of Position, filed March 30, 2009 at 3.

a hybrid RAM, as opposed to other RAM options (e.g., "formulaic" or "all forecast" RAMs):

Indexing is used where it is least controversial, as in the escalation of O&M expenses. There is no need for the complex calculations needed to measure input price and productivity trends for utility plant. The formulas permit adjustments for new information about inflation. The treatment of capital cost is flexible enough to accommodate surges in plant additions.

The hybrid RAM approach stabilizes revenue in the face of volume fluctuations that result, in the short run, from changes in weather and local economic conditions. This helps to reduce risk.

As discussed further in the HECO Companies' Opening Brief, the Companies and the Consumer Advocate are proposing a hybrid RAM, in which O&M expenses are escalated using a formula that includes inflation or input cost escalators (a formulaic approach), and rate base is escalated based on a trended forecast. The hybrid RAM proposed by the HECO Companies and the Consumer Advocate is neither novel nor untested. Although a variety of approaches to RAM design have been used in California since the inception of decoupling, the hybrid approach has been the most common over the years.

Moreover, the hybrid RAM is the only mechanism that meets the Energy Agreement criteria, which includes a mechanism based on cost tracking indices such as those used by the California regulators, not based on customer count, and providing revenue adjustments for the differences between the amount determined in the last rate case and the current cost of operating the utility and the return on and return of ongoing capital investment.<sup>178</sup>

In addition, the HECO Companies addressed a number of

---

<sup>178</sup>HECO Reply Brief, Exhibit A at 6-7.

other RAM variants in response to IRs issued by the commission on July 15, 2009, including (1) a revenue adjustment equal to the authorized return and depreciation on net additions related to system reliability; (2) a revenue adjustment equal to the authorized return and depreciation on net additions related to customer additions; (3) a revenue adjustment equal to the difference in O&M costs associated with complying with Act 155; (4) the O&M portion of the RAM proposed by the HECO Companies and the Consumer Advocate (i.e., RAM without rate base adjustments); (5) the total of items (1), (2) and (3); (6) the total of items (1), (2) and (4); and (7) each of the above with and without a RPC "with reset". With respect to these options, the HECO Companies maintain that:

While the adoption of one of the revenue enhancement tools discussed above would provide the utilities with a clear understanding of the regulator's priorities, each tool alone would not achieve the same potential for reduction of rate case frequency that would be provided by the revenue decoupling proposal submitted by the Consumer Advocate and the HECO Companies, would insert a degree of subjectivity into the process (i.e., with regards to what is the definition of Act 155 costs) and may have unintended consequences with regards to expenditures and investments made by the utilities.<sup>179</sup>

The Consumer Advocate similarly notes that "the NRRI alternatives defining eligible RAM transactions lead to

---

<sup>179</sup>Id. at 9.

substantially increased complexity for the HECO Companies to develop and compile information not typically maintained in the normal course of business” and the Consumer Advocate therefore “urges the Commission to avoid creation of a new regulatory adjustment mechanism using vaguely defined terms or categories, driven by cost classification criteria that are not directly retrievable from existing books and records.”<sup>180</sup> Likewise, DBEDT states that “[t]he downside of these targeted revenue adjustment mechanisms is the difficulty of determining the costs that qualify to be included under these categories.”<sup>181</sup>

DBEDT noted that the RAM variants raised in the commission’s post hearing IRs to the Parties<sup>182</sup> are examples of “targeted” revenue adjustment mechanisms, and are variants of the HECO Companies’ and Consumer Advocate’s RAM proposal. According to DBEDT, these mechanisms provide for increases in only certain specific cost categories, such as those related to system reliability, plant additions or costs associated with complying with Act 155. Adopting any of one of these targeted revenue enhancing mechanisms requires a clear and transparent definition and guidelines from the commission on what costs

---

<sup>180</sup>Consumer Advocate Opening Brief at 26.

<sup>181</sup>DBEDT Opening Brief at 37.

<sup>182</sup>I.e., the IRs renumbered as PUC-IR-52 a, b and c.

qualify under each classification to insure that there is no double counting or double recovery of any cost items, and a clear and transparent reporting requirement from the utility.<sup>183</sup>

c.

#### Findings

With regard to HDA's "fixed charge per customer", i.e., RPC, earnings decoupling mechanism and HREA's Idaho Model, the commission finds any issues related to these two proposed mechanisms to be moot, as both have been withdrawn by the sponsoring party.

With respect to HDA's RPC proposal specifically, the commission finds it important to ensure that the HECO Companies remain financially healthy between rate cases. The RPC mechanism, which was not intended to address issues such as regulatory lag, will not perform as well as the RAM in meeting the objective to maintain the companies' financial integrity. The commission finds that the RPC methodology cannot be expected to track fixed costs as well as the RAM mechanism and therefore cannot be expected to reduce the frequency of future formal rate cases. In addition, the commission finds that the RPC method may not provide adequate rate relief where the increases in costs may be far greater than the increases in customers, or

---

<sup>183</sup>DBEDT Opening Brief at 37.

where the customer base is decreasing.

With respect to the other RAM alternatives and variants addressed in the record, the commission finds that they also would not perform as well as the RAM proposed in the Amended Joint Proposal. The commission agrees with the Consumer Advocate that the proposed partial RAM variants were unlikely to achieve a balanced quantification of changing revenue requirements and would be administratively unworkable and likely to lead to intractable controversy. The commission agrees that the creation of a new regulatory adjustment mechanism using vaguely defined terms or categories, driven by cost classification criteria that are not directly retrievable from existing books and records should be avoided. The RAM included in the Amended Joint Proposal was carefully tailored to employ readily available cost inputs from the HECO Companies' books and prior rate orders, using simple calculations with an annual filing that should be relatively easy to quickly audit without controversy. These characteristics are essential for efficient administration of any RAM, and to avoid the RBA/RAM process devolving to annual contested ratemaking proceedings.<sup>184</sup>

The commission finds that the RAM's treatment of capital costs is relatively simple and flexible enough to

---

<sup>184</sup>Consumer Advocate Opening Brief at 26.

accommodate changes in plant additions, without introducing complex and difficult-to-define criteria for cost recovery. Additionally, the proposed RAM calculations produce conservative results that address most of the major variables impacting changing revenue requirements between test years, such as wage rates and inflationary impacts upon non-labor expenses, recovery of new infrastructure investment costs and related return requirements and related taxes. Moreover, the commission finds that the RAM is the only mechanism presented in the record of this proceeding that clearly meets the stated Energy Agreement criteria.

Accordingly, the commission finds that the RPC mechanism and other RAM alternatives not included in the Amended Joint Proposal would not achieve Hawaii's objectives as well as the RAM proposed in the Amended Joint Proposal.

5.

ECAC Amendment

The fifth issue in this docket is: "Energy Cost Adjustment Clause Amendment: What are Its Advantages and Its Disadvantages, In Terms of Hawaii's Objectives?"<sup>185</sup>

The ECAC employed by the HECO Companies relies upon a partial pass-through formula that holds management responsible

---

<sup>185</sup>Order Establishing Hearing Procedures at 6.

for maintaining the thermal efficiency of generating resources through a fixed sales heat rate that is established in rate cases. This process is intended to provide balanced incentives for management to invest in prudent levels of new capital investment and maintenance of its production facilities or suffer the consequences of failing to do so.<sup>186</sup>

Concerns about the fixed sales heat rate and its function in a decoupling environment were raised by HDA, HREA, and DBEDT and discussed in detail in the April 20, 2009 technical workshop session involving the Parties to this docket. These concerns are in two areas that were explained by HDA in the panel hearings. First, changes in sales and energy production that are intended to be neutralized under decoupling may actually have an income impact due to the fixed sales heat rate in the ECAC. Second, the introduction of added as-available renewable energy, as envisioned under the Energy Agreement, may adversely impact the system sales heat rate with a resulting ECAC financial penalty to the HECO Companies that should not be allowed to discourage the development and interconnection of such resources.<sup>187</sup>

During the same technical workshop, the HECO Companies

---

<sup>186</sup>Consumer Advocate Opening Brief at 27.

<sup>187</sup>See id. at 27-28 (citing Tr. Vol. III at 556-58 (Freedman)).

identified the reasons for keeping the fixed sales heat rate. First, the fixed sales heat rate provides an effective incentive for the utilities to maintain their generating units in order to run as efficiently as possible. Second, the fixed sales heat rate serves as a risk sharing mechanism, such that the utilities are at risk of not recovering all of their fuel expenses if they do not properly manage the generating units' operating parameters under their control.

In their Joint FSOP, the HECO Companies and the Consumer Advocate agreed with HDA that the fixed sales heat rate could result in the utilities recovering more or less than their fixed costs under sales decoupling, and that the fixed sales heat rate may incent the utilities to take less renewable energy under certain circumstances.<sup>188</sup>

Thus, the Parties agreed with the concerns raised by HDA and that the ECAC should be modified, but HECO and the Consumer Advocate disagreed with the other parties as to how the ECAC should be modified.

The Joint FSOP included a "deadband concept around fixed sales heat rates" and proposed a deadband width for HECO of  $\pm 50$  British thermal units ("Btu")/kWh-sales above and below the test year sales heat rate, which represents less than 1% of

---

<sup>188</sup>See Joint FSOP, Exhibit D.

the system sales heat rate for HECO. In the June 25, 2009 Exhibits, the HECO Companies and the Consumer Advocate submitted proposed deadbands for MECO and HELCO of:  $\pm 100$  Btu/kWh-sales for MECO - Maui Division;  $\pm 50$  Btu/kWh-sales for MECO - Lanai and Molokai Divisions; and  $\pm 100$  Btu/kWh-sales for HELCO.<sup>189</sup>

In its Opening Statement of Position in this docket, HDA proposed, among other things, to convert the existing ECAC to a straight full cost pass through for fuel and purchased energy expenses.<sup>190</sup> According to HDA, a straight cost pass through: (1) would considerably simplify administration of the fuel adjustments and the decoupling mechanisms; (2) is consistent with the objectives of the RAM generally, i.e., reduction of risk and uncertainty in full recovery of utility expenses; and (3) would "decouple" utility earnings from resource commitment (and curtailment) decisions.

a.

#### ECAC Amendment Details

As noted above, in Exhibit D to their Joint FSOP, the HECO Companies and the Consumer Advocate submitted their "deadband concept around fixed sales heat rates", which had

---

<sup>189</sup>See Attachment 7 to Revised Exhibit C, submitted with the June 25, 2009 Exhibits.

<sup>190</sup>Haiku Design and Analysis Opening Statement of Position, dated March 28, 2009 at 6-7, Item (7).

previously been discussed in the workshops. The HECO sales heat rate deadband was based on an assumption of the possible impact of decoupling to be equivalent to a 5% reduction in sales and assumed that the relationship between the change in sales and the change in efficiency factor is linear. This resulted in a deadband width of  $\pm 50$  Btu/kWh-sales above and below the test year sales heat rate, which represents less than 1% of the system sales heat rate for HECO. The relatively small deadband for HECO of  $\pm 50$  Btu/kWh-sales takes into account the size of the HECO system (relative to those of MECO and HELCO), and the size of the independent power producer ("IPP") facilities expected to be added prior to the resetting of HECO's rate case heat rate target in its next rate case, which is expected to use a 2011 test year.<sup>191</sup>

Based on production simulation runs for scenarios where additional increments of renewable energy generation are integrated into the grids, the HECO Companies anticipate that

---

<sup>191</sup>See page 3 of Attachment 7 to Revised Exhibit C, submitted with the June 25, 2009 Exhibits. The proposed deadband for MECO - Maui Division is  $\pm 100$  Btu/kWh-sales and is based on production simulation runs that indicate that Maui's diesel system heat rate could increase by 61 Btu/kWh-net based on a decrease in sales by 5%, and could decrease by 45 Btu/kWh net based on an increase in sales by 5%. The proposed deadband for HELCO of  $\pm 100$  Btu/kWh-sales is consistent with the deadband width proposed for MECO - Maui Division. These deadbands are intended to accommodate small IPP additions (such as photovoltaic additions sized below the competitive bidding threshold). The proposed deadbands for MECO - Lanai and Molokai Divisions of  $\pm 50$  Btu/kWh-sales are consistent with the width selected for HECO.

changes in any of the utilities' heat rates could exceed the bounds of the deadbands. In recognition of these potential occurrences, the HECO Companies and the Consumer Advocate identified the circumstances (or triggers) under which the redetermination of the sales heat rates would be undertaken in the future, which included size thresholds for (1) non-utility firm or non-utility non-firm renewable resources (such as wind or photovoltaics ("PV")) from which the utility will purchase capacity and/or energy under a power purchase agreement ("PPA") and (2) utility firm and non-firm renewable resources (such as wind or PV). In addition, a redetermination of the HECO Companies' sales heat rates could be triggered by additions, retirements or modifications to their generating systems, or modifications to their generating system operating procedures, that are expected to increase or decrease the target heat rates by more than the deadband amounts.<sup>192</sup>

The process used to reset the fixed sales heat rate factor was identified in Exhibit C, Attachment 7 of the June 25, 2009 Exhibits.

In its Opening Brief, the Consumer Advocate stated that the proposed ECAC sales heat rate deadbands and procedures for sales heat rate re-determination are reasonable solutions that

---

<sup>192</sup>Id. at 4.

address the concerns raised by the Parties. According to the Consumer Advocate, this approach creates an acceptable range for system thermal efficiency performance variations around expected levels, as may be caused by changing sales levels, without completely discarding the incentives for utility management to maintain and operate its generating resources to achieve efficiency.<sup>193</sup>

As reflected in the compromises reached between the HECO Companies and the Consumer Advocate, the proposed amendment to the existing ECAC mechanism, with the addition of a deadband element would serve to: (1) maintain the utilities' incentive to maximize generation efficiency; (2) provide a mechanism which is responsive to the anticipated increasing adoption of more renewable resources onto the utilities' grids; (3) maintain some risk sharing between shareholders and ratepayers; and (4) allow the utilities some flexibility to reset the sales heat rate in accordance with changes to the utilities' grids and the timing and amount of renewable resources added.

b.

#### NRRI Alternatives

In its post-hearing IRs, the commission (through its consultant, NRRI) asked the parties to comment on two

---

<sup>193</sup>Consumer Advocate Opening Brief at 29.

alternatives to the deadband proposal, including options in which: (1) the utility bears the risk for heat rate changes within a "performance band" (e.g., plus/minus 50 Btu from the target), while all changes in costs associated with sales heat rate changes outside the performance band are passed through to customers;<sup>194</sup> and (2) the ECAC remains the same as the current ECAC, but the Btus used for spinning reserve are "removed" from the heat rate calculation.<sup>195</sup>

The HECO Companies responded that the first option does not adequately address the concerns raised by the other parties, and would be inferior to the deadband proposal, as well as to the option of eliminating the fixed sales heat rate altogether.<sup>196</sup> The performance band concept would produce revenues that would never be representative of variable fuel and purchased energy expense, and the concept would only partially remove the disincentive for renewable energy additions that increase the heat rate. With sales decoupling and the performance band concept, the utilities would continue to recover more or less than their fixed costs.

In contrast, under the joint deadband proposal, the

---

<sup>194</sup>See PUC-IR-62.

<sup>195</sup>See PUC-IR-63.

<sup>196</sup>See HECO response to PUC-IR-62; see also HDA and Consumer Advocate responses to PUC IR-62.

utilities would more accurately recover their fixed costs under sales decoupling (when the actual heat rate is within the range of the upper and lower heat rate deadband).

The Consumer Advocate maintained that:

[T]he heat rate band and the target heat rates established under the jointly proposed ECAC will provide an appropriate sharing of risk between Hawaiian Electric and the ratepayers, provide an incentive for Hawaiian Electric to reasonably manage and operate its resources reliably and efficiently, and provide for the greater use of renewable energy and sales reductions due to energy efficiency programs while preserving Hawaiian Electric's financial integrity.<sup>197</sup>

With respect to the second option (where the ECAC remains the same as the current ECAC, but the Btus used for spinning reserve are "removed" from the heat rate calculation), the HECO Companies state that it "is simply unworkable."<sup>198</sup> According to the HECO Companies, "[A]ll Btus generate electricity. Therefore, technically, it is impossible to remove the Btus used for spinning reserve from the heat rate calculation."<sup>199</sup>

The responses of HDA, the Consumer Advocate and Blue Planet to PUC-IR-63 are consistent with the HECO Companies'

---

<sup>197</sup>Consumer Advocate response to PUC-IR-62.

<sup>198</sup>See HECO Companies' response to PUC-IR-53 and PUC-IR-63; see also HDA, CA and Blue Planet responses to PUC-IR-63.

<sup>199</sup>HECO Companies' response to PUC-IR-63 at 1.

response.<sup>200</sup>

c.

Parties' Positions

HECO Companies and Consumer Advocate

According to the HECO Companies and the Consumer Advocate, the ECAC deadband concept was proposed as a means to balance the sometimes competing objectives of promoting efficient operation and the need to integrate additional renewable energy.<sup>201</sup> The Consumer Advocate maintains that if the fixed sales heat rate were eliminated, the HECO Companies' management could neglect their production facilities and pass along any resulting deterioration (increase) in the system heat rate to customers in the form of higher ECAC charges. Additionally, the fixed sales heat rate serves as a risk sharing mechanism between the utilities and their ratepayers,<sup>202</sup> in compliance with Act 162.<sup>203</sup>

---

<sup>200</sup>HDA, Consumer Advocate and Blue Planet responses to PUC-IR-63.

<sup>201</sup>See HECO Reply Brief at 56.

<sup>202</sup>Consumer Advocate Opening Brief at 27.

<sup>203</sup>2006 Haw. Sess. L. On June 2, 2006, the governor of Hawaii signed into law Act 162, which amends Section 269-16 of the Hawaii Revised Statutes. Act 162, in part states that:

Any automatic fuel rate adjustment clause requested by a public utility in an application filed with the commission shall be designed, as determined in the commission's discretion, to: (1) Fairly share the risk of fuel cost changes between the public utility and its customers[.]

The Consumer Advocate notes that "heat rate analyses were performed by the HECO Companies and reviewed by the Consumer Advocate, supportive of the implementation of specific BTU per kilowatt-hour deadbands around the fixed heat rate of each utility."<sup>204</sup> According to the Consumer Advocate, "The deadbands are designed to accommodate all reasonably anticipated changes in sales levels that would produce system heat rate impacts, with triggers for redetermination of the heat rate target and deadband under certain circumstances involving the addition of new resources that require a Purchased Power Agreement ('PPA')."<sup>205</sup>

#### Position of HDA and HREA

HDA's position with respect to this issue (in which HREA joins) is that "the ECAC should be amended, either by adopting the deadband proposal recommended by Hawaiian Electric and the Consumer Advocate or by simplifying the ECAC to a straight pass through of actual fuel and purchased energy expenses."<sup>206</sup> "HDA favors changing the ECAC reconciliation to a full pass through of actual generation expenses along with regular reporting requirements and periodic review to ensure

---

<sup>204</sup>Consumer Advocate Opening Brief at 28.

<sup>205</sup>Id. at 28-29.

<sup>206</sup>HDA Opening Brief at 9.

that efficient operation of the utility systems is maintained.”<sup>207</sup> According to HDA, a full pass-through would be favorable because, “The deadband approach appears to be too simplistic to function properly” and “[a] deadband approach adds further complexity to an already complicated adjustment and reconciliation mechanism.”<sup>208</sup>

In response, the HECO Companies maintain that the deadband proposal adequately addresses the concerns raised by HDA, without sacrificing the benefit of having the fixed heat rate target efficiency factor.

#### Blue Planet and HSEA

Blue Planet responded to this issue by putting forth its view of the advantages and disadvantages of a straight fuel cost pass-through and of a “performance band” that was suggested in PUC-IR-62.<sup>209</sup> Blue Planet does not expressly endorse any particular type of ECAC mechanism (e.g., straight fuel cost pass-through, ECAC deadband or ECAC performance band). However, Blue Planet’s Opening Brief (in which HSEA joins) appears to

---

<sup>207</sup>Id. at 30 (footnote omitted).

<sup>208</sup>Id. at 34.

<sup>209</sup>As suggested by PUC-IR-62, a “performance band” would be “an ECAC in which (a) the utility bears the risk for heat rate changes within a performance band (e.g., plus/minus 50 Btu from the target) while (b) all changes in costs associated with heat rate changes outside the performance band are passed through to customers.”

favor a straight fuel cost pass-through, stating the advantages of such a mechanism and the disadvantages of the existing ECAC mechanism and the performance band concept. For example, Blue Planet contends that, "The existing ECAC provides an incentive for utilities to minimize operation reserve capacity. Adding intermittent renewable generation resources to utility systems, however, may require increased operating reserve capacity." A "straight fuel cost pass-through may decouple utility earnings from operation reserve capacity decisions and, therefore, may remove a disincentive for the HECO Companies to integrate additional renewable energy resources into the grid."

Furthermore, according to Blue Planet, "The current ECAC mechanism may also allow the HECO Companies to retain a portion of the fuel cost savings from a decline in sales. Thus, absent a straight cost pass-through ECAC, the HECO Companies may be overcompensated if a decoupling mechanism is implemented with the current ECAC and utility sales decline."<sup>210</sup>

If Blue Planet does in fact support a full pass-through of fuel expenses, Blue Planet's position (and accordingly HSEA's position) is the same as the positions of DBEDT, HDA and HREA, who, as discussed herein, also support full pass-through of fuel expenses through the ECAC.

---

<sup>210</sup>Blue Planet Opening Brief at 16-17.

## DBEDT

DBEDT does not support the adoption of a deadband around the fixed efficiency factor, and noted in its Opening Brief that, if the commission adopts a decoupling mechanism for the HECO Companies, the ECAC should be modified such that the "efficiency incentive" currently built into the ECAC calculation through the use of a fixed efficiency factor is either eliminated or modified.<sup>211</sup>

According to DBEDT, the ECAC calculation provides a disincentive for the utilities to integrate and add renewable power generation, especially variable or intermittent renewable generation, in the system. Such additions would require the utility to run higher amounts of spinning reserve (or regulating reserve) that lower efficiency.<sup>212</sup>

---

<sup>211</sup>If fixed efficiency factors continue to be used in an ECAC calculation, DBEDT asserts that they "must be modified such that these factors are calculated using the kilowatt-hours at the net generation level (resulting in lower heat rate value which means higher efficiency) rather than using the kilowatt-hours at the sales level (resulting in higher heat rate value which means lower efficiency)." See DBEDT Opening Brief at 31-35; see also The Department of Business, Economic Development, and Tourism's Reply Brief, filed September 29, 2009 ("DBEDT Reply Brief") at 13-21.

In response, the HECO Companies state that DBEDT appears to misunderstand the calculation of heat rate, in that the heat rate of a system can be calculated at the sales level or at the net-to-system level, and the amount of energy arriving at the customer's meter (i.e., at the "customer level" or "sales level") is less than the amount of energy delivered at the net-to-system point. See HECO Reply Brief at 61-64.

<sup>212</sup>DBEDT Opening Brief at 31-32 (footnote omitted).

In response to this assertion, the HECO Companies maintain that they do not have the discretion to reduce variable generation in favor of their own fossil-fueled generation. The HECO Companies state that they can lawfully curtail variable renewable generation only under very limited circumstances, such as when variable generation resources are violating performance standards, when there is excess energy on the system, or when accepting the energy would result in system problems.<sup>213</sup>

d.

#### Findings

Based on the record in this docket, the commission concurs with the Parties' concerns regarding the ECAC as identified by HDA. Under decoupling, the fixed sales heat rates in the HECO Companies' current ECACs may have an income impact and under certain circumstances may result in financial penalties to the HECO Companies that could discourage the development and interconnection of renewable resources.

However, implementing reporting and periodic review requirements as proposed by HDA, to see if HECO is operating efficiently under a full cost pass-through ECAC, is not an effective substitute to a modified ECAC that retains the fixed sales heat rate concept. First, HDA's proposed review would

---

<sup>213</sup>See HECO Reply Brief at 60; see also Tr. Vol. III at 573 (Sakuda).

occur after revenue has already been collected from ratepayers, and/or curtailments of renewable energy have already been undertaken. Second, it would shift the burden and cost of monitoring and policing primarily to the commission.

Including a fixed sales heat rate in the ECAC has been a long-standing commission practice. In HECO and HELCO's 1994 test year rate cases (Docket Nos. 7700 and 7764, respectively) the commission rejected the elimination of the fixed sales heat rate, which had been proposed by the Consumer Advocate in Docket No. 7700, and by HELCO in Docket No. 7764. The commission's decision in Docket No. 7700 was based on the following reasons: (1) the fixed sales heat rate provided a financial incentive for the utilities to more efficiently manage their own generation; and (2) without the system performance factors, the company could reduce its maintenance costs between rate cases and allow the system generating efficiency to degrade, and still be guaranteed the recovery of additional fuel costs incurred as a result of the reduced efficiency.<sup>214</sup> In Docket No. 7764, the commission stated that the proposed revisions to the clause would rob the utility of its incentive to operate efficiently

---

<sup>214</sup>See Decision and Order No. 13704, filed December 28, 1994 in Docket No. 7700 at 10-12.

and may, in fact, become a subsidy for inefficiency.<sup>215</sup>

Furthermore, with the enactment of Act 162 in 2006,<sup>216</sup> "Any automatic fuel rate adjustment clause requested by a public utility in an application filed with the commission shall be designed, as determined in the commission's discretion, to: (1) Fairly share the risk of fuel cost changes between the public utility and its customers. . . ." <sup>217</sup> Accordingly, the commission is obligated to consider how a change in the fixed sales heat rates would affect how fuel price risk is shared between the utilities and their customers. Thus, the commission will not eliminate the fixed sales heat rates such that there would be a full pass through of fuel expenses to the ratepayer.

However, the commission also acknowledges that the fixed sales heat rate included in the ECAC could result in the HECO Companies recovering more or less than their actual energy costs under sales decoupling, and that the fixed sales heat rate may incent the utilities to take less renewable energy under certain circumstances.

The commission finds that amending the ECAC to include a deadband around fixed sales heat rates, as proposed in the

---

<sup>215</sup>See Decision and Order No. 13762, filed February, 10, 1995 in Docket No. 7764 at 12.

<sup>216</sup>2006 Haw. Sess. L.

<sup>217</sup>HRS § 269-16.

Amended Joint Proposal, will strike a reasonable balance between the sometimes competing objectives of promoting efficient operation and the need to integrate additional renewable energy. Furthermore, under the Amended Joint Proposal, the addition of larger increments of renewable resources will trigger a study and production simulation analysis to be filed with the commission, which will allow the commission, Consumer Advocate and other parties the opportunity to review, before the fact, how the affected utility intends to operate its system to accommodate the addition of the larger renewable resource, and provide performance expectations, which may be useful if subsequent events and/or performance differ from expectations, and problems or concerns need to be resolved by the commission.

Therefore, the procedures for changing the target sales heat rates and the implementation of the sales heat rate deadbands, as described in Exhibit C, Attachment 7 to the June 25, 2009 Exhibits (attached as Exhibit 7 to this Decision and Order) shall be effective for HECO upon the issuance of a final Decision and Order by the commission in HECO's 2009 test year rate case, Docket No. 2008-0083. The procedures and implementation of sales heat rate deadbands and changes in the target sales heat rates for MECO and HELCO, as described in Exhibit 7 hereto shall be effective for MECO and HELCO to the

extent ordered in any interim and/or final decision and orders issued in the respective 2010 test year rate cases that are pending for each of those companies in Docket Nos. 2009-0163 and 2009-0164, respectively.

In terms of Hawaii's objectives, the commission finds that the advantages of the ECAC amendment included in the Amended Joint Proposal outweigh the disadvantages of the amendment. Accordingly, the commission finds the proposed ECAC amendment is reasonable and in the public interest, and should be approved.

6.

Decoupling Review Process and Safeguards

The sixth issue in this docket is: "What Review Process and Safeguards Should the Commission Consider?"<sup>218</sup>

The record in this proceeding addresses a number of proposals concerning the review process and safeguards for decoupling, as reflected in both the Energy Agreement, as well as in proposals and recommendations independently submitted by various parties to this docket. As discussed in turn below, these proposals include recommendations regarding: (1) HCEI performance metrics and reporting; (2) an Earnings Sharing Revenue Credits mechanism; (3) a mechanism providing for the

---

<sup>218</sup>Order Establishing Hearing Procedures at 6.

refund to ratepayers (with interest) of RAM revenues associated with disallowed costs for Major Capital Projects and Baseline Capital Projects; (4) inclusion of service quality metrics in the RAM; and (5) on-going review of decoupling.

a.

HCEI Performance Metrics

A primary point of difference remaining among the parties in this docket relates to the issue of clean energy-related decoupling performance metrics, which the HECO Companies now generally support.<sup>219</sup> In fact, the support of some of the Parties for the RAM component of decoupling is qualified by their desire to directly link accomplishment of RPS goals or commitments in the Energy Agreement to the HECO Companies' receipt of revenues under the proposed RAM. In effect, these parties seek to make the availability of any revenue increases resulting from the RAM the quid pro quo for meeting the commitments.<sup>220</sup> These parties proposed various metrics intended to measure the HECO Companies' achievement of the commitments (which have been referred to as "HCEI Performance Metrics"), and proposed reductions in the RAM revenues if the metrics are not

---

<sup>219</sup>See HECO Reply Brief at 79-80.

<sup>220</sup>See closing statement of HSEA, Tr. Vol. III at 709 (Duda); see also HDA Opening Brief at 19-21.

achieved.<sup>221</sup>

#### HCEI Status Report

The HECO Companies initially questioned the efficacy, necessity and benefits of tying cost recovery under the RAM to achievement of the HCEI Performance Metrics originally suggested by other parties. See HECO Companies OB at 78-81. However, in the April 20, 2009 technical workshop, in response to the concerns of the other parties, the Consumer Advocate proposed and the HECO Companies agreed to provide a report on the status of HCEI initiatives, such as New Net Energy Metering ("NEM") (megawatt ("MW") and customers), the amount of New Renewable

---

<sup>221</sup>For example, DBEDT and Blue Planet initially proposed performance metrics that envisioned tying decoupling revenue collection to measurement of: the number of New NEM (MW or customers), the number of Pay-As-You-Save ("PAYS") program participants (MW or customers), the amount of New Renewable Energy purchased under the FIT (MW or kWh), the increase in other renewable/nonfossil-based energy generation (MW or kWh), the amount of decrease in fossil oil used during the year, and the amount of increase in energy savings (kWh) resulting from energy efficiency programs and demand-side programs. In its Opening Brief, DBEDT amended its performance metrics to remove metrics based on initiatives pending Commission approval and now propose that the target goals include the addition of new MW from NEM, addition of MW of renewable energy, and the number of new net energy customers interconnected during the year. In its Opening Brief, Blue Planet proposed a Clean Energy Utilization Performance Incentive Mechanism which is proposed to measure the annual improvement in percent of total energy requirements supplied by clean energy resources. Based on certain assumptions and a goal that RPS is modified to be 70% by 2030 and there is no EEPS, HREA initially proposed two approaches to performance measurement: (1) a straight line approach based on an annual additional RPS goal of 2.75%, and (2) a Specific Projects/Activities approach. HECO Opening Brief at 77 (footnotes omitted). The HECO Companies' concerns with these HCEI Performance Metrics proposals are documented in pages 76 to 81 of the HECO Companies' Opening Brief.

Energy purchased under the Feed-in Tariff ("FIT") (MW or kWh) when effective and the increase in other renewable/nonfossil-based energy generation (MW or kWh) ("HCEI Status Report"), as part of its testimony and exhibits in the next cycle of rate cases. This status report will be timely and relevant in the proceedings wherein the commission will determine whether the decoupling mechanism and its RBA and/or RAM elements should be continued, modified or terminated.<sup>222</sup> The HECO Companies also agreed to include and have explicitly included language in the RAM tariff provision memorializing their commitment to provide the HCEI Status Report in the next rate case cycle.<sup>223</sup>

As noted in the Consumer Advocate's Opening Brief, a formal review of decoupling is to be conducted in the HECO Companies' next round of rate cases, and the Amended Joint Proposal includes a number of consumer safeguards, including a report of the HECO Companies' achievements and the status of certain HCEI initiatives and performance objectives. The Consumer Advocate determined that this was appropriate because many factors impacting the pace at which customer-sited distributed generation ("DG") and other renewable resources can be deployed are not controlled by HECO Companies. It is also

---

<sup>222</sup>See HECO Opening Brief at 81-82.

<sup>223</sup>Id. at 46; see also Joint FSOP, Exhibit B.

not possible at this time to specify detailed performance expectations given ongoing proceedings before the commission that will influence the rate of renewables deployment.<sup>224</sup>

#### DBEDT's Proposed HCEI Performance Metrics

In its Opening Brief, DBEDT maintains that it is necessary and prudent to link HECO's proposed RAM mechanism to performance metrics related to Hawaii's energy goals<sup>225</sup> and submitted a performance measure proposal to adjust HECO's RAM<sup>226</sup> for the MWs of new NEM added, MWs of new renewable energy (excluding NEM) added, and number of new NEM customers interconnected within a year.<sup>227</sup>

With regard to HCEI Performance Metrics, the HECO Companies took the position in their Opening Brief that:

[T]ying a "performance-based" indexing of HCEI goals to the RAM is not necessary, because (1) the RAM will be reviewed in each of the HECO Companies' rate cases subsequent to their respective 2009 test year rate case in which decoupling will be implemented, (2) there are mechanisms in the Joint Decoupling Proposal for

---

<sup>224</sup>Consumer Advocate Reply Brief at 13-14; see also Consumer Advocate Opening Brief at 32.

<sup>225</sup>See DBEDT Opening Brief at 19-26; see also DBEDT Reply Brief at 21-26.

<sup>226</sup>DBEDT's revised proposal in its Opening Brief does not specify which proposed RAM or whether both rate base RAM and O&M RAM as proposed by HECO and the Consumer Advocate would be subject to their proposed performance measure adjustment.

<sup>227</sup>DBEDT Opening Brief at 19-26; see DBEDT Reply Brief at 21-26.

the review and discontinuance, if appropriate, of the decoupling mechanism, and (3) the RPS Framework includes de facto enforcement and penalty provisions should the Companies fail to make adequate progress toward the renewable energy goals.<sup>228</sup>

With respect to the performance measure proposal included in DBEDT's Opening Brief, the HECO Companies note that it is based on measures that are beyond HECO's control, including: (1) the number of NEM installations; (2) the load profiles of customers and the energy output profiles of DG systems; (3) the state and federal tax incentives, credits and subsidies available to these customers; (4) the amount of rooftop or land space available at each site; (5) the price of PV and other NEM-qualifying generation technologies compared to the retail price of electricity for customers' rate schedules; (5) the ability of IPP developers to either provide an unsolicited PPA proposal or respond to requests for proposals for energy; (6) the willingness and ability of IPP developers to invest in preliminary siting, permitting and engineering to develop sufficiently detailed PPA project proposals; (7) the availability of qualifying tax credits or tax incentives; (8) the ability of IPPs to obtain project financing; and (9) the ability of IPP developers to obtain all necessary permits and approvals for the construction and operation of generating

---

<sup>228</sup>See HECO Opening Brief at 79; HECO Reply Brief at 78.

facilities.<sup>229</sup>

In addition, the HECO Companies maintain that DBEDT's proposed performance measures: (1) are based on the number of new NEM customers and MWs of NEM and non-NEM renewable energy additions which are inconsistent with the RPS law's formula to determine the MWh of renewable energy generation; (2) would have the consequence of encouraging the utility to install many NEM and other renewable energy installations of high MW nameplate capacity that may not provide much renewable energy generation; and (3) would encourage the addition of such projects without any regard to the relative cost of such projects compared with other renewable energy projects with lower nameplate capacity but with higher capacity factor and greater annual MWh generation.<sup>230</sup>

#### Blue Planet's Proposed CEU PIM

In its Opening Brief, Blue Planet (joined by HSEA) proposed a Clean Energy Utilization ("CEU") Performance Incentive Metric ("PIM"),<sup>231</sup> which would implement RAM rate adjustments of +/- \$7M, +/- \$2M and +/- \$2M for HECO, HELCO and MECO, respectively, based upon each company's annual change in

---

<sup>229</sup>See HECO Reply Brief at 82-83.

<sup>230</sup>See id. at 83-84.

<sup>231</sup>Blue Planet Opening Brief at 22.

percentage utilization of clean energy. The CEU PIM target reflects about a 1% annual increase in the CEU ratio. The CEU PIM is proposed as a symmetrical mechanism "to reward excellent improvement and penalize poor performance with respect to achieving Hawaii energy objectives."<sup>232</sup> Although not fully developed, the CEU PIM proposal suggests that rewards for achieving results higher than the target would not be subject to the earnings sharing mechanism since the rewards are calibrated to changes in the individual companies' ROEs. Also, Blue Planet states that:

In the event the [c]ommission reduces the HECO Companies' ROE in a rate case to reflect the lower cost of equity capital, it may be appropriate for the HECO Companies to have recourse to a performance incentive mechanism as may be adopted by the [c]ommission. Such a mechanism may allow the HECO Companies to restore and increase profits based upon their successful achievement the Hawaii clean energy law and policy objectives [sic].<sup>233</sup>

Blue Planet maintains that "absent a PIM the Hawaii RPS law provides no incentives."<sup>234</sup> However, the commission does have the authority to impose penalties upon utilities for failure to achieve an RPS target. As noted by the HECO Companies:

---

<sup>232</sup>Id. at 24.

<sup>233</sup>Id. at 15.

<sup>234</sup>Id. at 20.

The RPS law has its own enforcement mechanism, and the Commission had adopted a penalty framework to supplement the RPS law, in Docket No. 2007-0008. Any "performance-based" indexing of HCEI goals to the RAM should be consistent with the enforcement, penalty and mitigation measures that are already contained in the RPS law, and in the Framework for Renewable Portfolio Standards (December 20, 2007) and penalty provisions promulgated by the Commission pursuant to the RPS law in Docket No. 2007-0008.<sup>235</sup>

According to Blue Planet, a PIM can be utilized to encourage additional and more precise quantification of progress or lack of progress in achieving RPS objectives.<sup>236</sup> However, the HECO Companies note that since 2003, the HECO Companies have filed annual updates on their RPS percentages both individually and on a consolidated basis that provide very detailed quantifications of RPS components. The HECO Companies further note that in contrast, Blue Planet's CEU PIM formula differs from the RPS formula, making it unclear how the proposed CEU PIM, as proposed, provides "precise quantification of progress or lack of progress in achieving RPS objectives."<sup>237</sup>

In addition, the HECO Companies maintain that:

Blue Planet's proposed CEU PIM is based on annual performance relative to the prior year. Because

---

<sup>235</sup>HECO Opening Brief at 78; see Decision and Order No. 23912, issued December 21, 2007, and Order Relating to RPS Penalties, issued December 19, 2008, in Docket No. 2007-0008.

<sup>236</sup>Blue Planet Opening Brief at 21.

<sup>237</sup>HECO Reply Brief at 85.

most MWhs of new renewable energy generation are added in blocks (such as when a central-station wind farm or geothermal facility is placed into service) with periods of less and often no increase in between these blocks, the CEU PIM would reward the utility in the first year of operation, but could penalize the utility in the second year of operation.<sup>238</sup> In an informal discussion with Blue Planet, the Companies raised the issue of the "lumpiness" of results as one of the primary concerns with the CEU PIM.<sup>239</sup>

#### HECO Companies' Proposed IPM

In their Opening Brief, the HECO Companies took the position that tying a "performance-based" indexing of HCEI goals to the RAM is not necessary, because: (1) the RAM will be reviewed in each of the HECO Companies' subsequent rate cases in which decoupling will be implemented; (2) there are mechanisms in the Joint FSOP for the review and discontinuance, if appropriate, of the decoupling mechanism; and (3) the RPS Framework includes de facto enforcement and penalty provisions should the HECO Companies fail to make adequate progress toward the renewable energy goals.<sup>240</sup>

According to the HECO Companies, in addition to falling in line with Hawaii's RPS law and related RPS penalty framework, any performance-based indexing of HCEI goals to the

---

<sup>238</sup>Blue Planet's proposed CEU PIM has a neutral impact if the CEU percentage increases at 1% per year.

<sup>239</sup>HECO Reply Brief at 85.

<sup>240</sup>See HECO Opening Brief at 79.

RAM "should also take into consideration that adding renewable resources to the system is often 'lumpy', yet takes a considerable amount of effort and time to complete."<sup>241</sup>

Noting that there is very little agreement among the Parties regarding the HCEI Performance Metric issue, HDA proposed that the commission take advantage of immediate opportunities by issuing an interim decision and order in the instant docket approving the RBA and RAM for HECO and continuing the decoupling proceeding to address the HCEI Performance Metric issue along with other decoupling issues.<sup>242</sup>

In general, the HECO Companies supported HDA's proposal. Accordingly, in their Reply Brief, the HECO Companies indicated that they -

are willing to continue the dialogue with the other parties regarding the linkage between accomplishment of RPS goals and decoupling as long as both award and penalty provisions are included in the performance incentive mechanism and the performance incentive mechanism is consistent with the RPS law as amended by Act 155 (2009). Therefore, the Companies now generally support the adoption of some type of broad-based clean energy PIM in this proceeding, subject to agreement on the specific mechanism and its details.<sup>243</sup>

Subsequently, as a result of "continued discussions

---

<sup>241</sup>HECO Reply Brief at 79.

<sup>242</sup>HDA Opening Brief 7-8.

<sup>243</sup>HECO Memo in Support at 18-23; see HECO Reply Brief at 79-80.

with one of the other parties in the docket” and in connection with their Interim Motion, the HECO Companies proposed (1) the continuation of this proceeding for the primary purpose of evaluating the design and potential adoption of clean energy-related decoupling performance metrics, and (2) the adoption of an interim performance metric (“IPM”), which would apply to Hawaiian Electric’s 2011 RAM and terminate when the interim decoupling mechanism terminates, which “would give the parties and the Commission an opportunity to evaluate the performance metric or PIM concept.”<sup>244</sup> However, the IPM proposed by the HECO Companies was only contemplated as a temporary measure if this docket were continued in order to more carefully develop a permanent and balanced performance mechanism.

As discussed further below, the Consumer Advocate objects to implementation of the IPM that HECO proposed as part of its requested interim relief in this docket.<sup>245</sup>

#### HDA

HDA supported the concept of linking RAM revenue changes to measured achievement of clean energy metrics. HDA’s Opening Brief (in which HREA joins) states that:

If the reasons for allowing revenue enhancements such as the proposed RAM are as compensation for

---

<sup>244</sup>HECO Memo in Support at 20-21.

<sup>245</sup>See Consumer Advocate Comments at 3, 6-11.

HECO's agreement to the terms of the Energy Agreement, it would be appropriate to make RAM revenues contingent upon HECO's performance in implementing the other terms of the Energy Agreement.<sup>246</sup>

However, HDA notes that "[i]f performance measures are to be implemented in this proceeding they need to be characterized in substantially more detail than what is currently on the record and they need to be appropriately examined." Thus, HDA suggests that "[f]urther examination of appropriate performance measures could be taken up in the continued proceedings" that HDA recommends.<sup>247</sup>

#### Consumer Advocate

"[T]he Consumer Advocate is not adverse to the concept of performance metrics being incorporated within the regulatory process." "[H]owever, due to the advanced state of the docket, the inability to thoroughly evaluate the proposed threshold and related matters, the Consumer Advocate is concerned with the proposed continuation of the docket and inclusion of the proposed PIM."<sup>248</sup> As a result, in its comments on the HECO Companies' Interim Motion, the Consumer Advocate states that the final order issued in this docket should "reject HECO's

---

<sup>246</sup>HDA Opening Brief at 20-21.

<sup>247</sup>Id. at 21.

<sup>248</sup>Consumer Advocate Comments at 10-11.

invitation to implement a newly-created interim performance mechanism that has not been subjected to critical examination by the Parties or presented in the panel hearings . . . .”<sup>249</sup>

In support of its position on this issue, the Consumer Advocate notes that: “no consensus has emerged on clean energy performance expectations, penalties or incentives” and that “the work done to date illustrates the tremendous uncertainties that continue to surround the complex legal, regulatory and technical processes involved in actually developing and integrating renewable resources.”<sup>250</sup>

The Consumer Advocate states that there is “no evidentiary support for the newly proposed Interim Performance Incentive Mechanism (‘PIM’) now being proposed by HECO” and that “HECO’s Motion does not explain how the 40MW target was derived or why it is reasonable and does not clearly define whether procurement must be complete with the resource in service and producing power in order to count.”<sup>251</sup>

According to the Consumer Advocate:

In the event the 40 MW target is overly optimistic and actual achieved results are lower, the RAM revenues intended for 2011 may be arbitrarily reduced to the financial detriment of HECO. On

---

<sup>249</sup>Id. at 5.

<sup>250</sup>Id. at 6.

<sup>251</sup>Id. at 8.

the other hand, if HECO is readily able to equal or exceed this proposed "target" with renewable projects already nearing fruition, no incentive is achieved because RAM revenues cannot exceed 100 percent of the amounts generated by application of RAM formulae. Alternatively, tying realization of RAM revenues to successful procurement of the 40MW target may encourage HECO to expedite contract negotiations on less than optimal terms, to the long term disadvantage of ratepayers.<sup>252</sup>

Thus, "the Consumer Advocate is concerned that the proposed metric would not actually produce the desired results, and may actually produce unreasonable financial results without regard to meaningful clean energy performance measurement."<sup>253</sup>

The Consumer Advocate also notes that "[p]rovisions were made in the JFSOP to hold the HECO Companies fully accountable for their performance relative to RPS objectives and the other commitments made by the utilities in support of clean energy," and "encourages issuance of a Final Order that adopts the Joint FSOP and the agreement therein for formal review of HECO's achieved HCEI performance as part of the global review of decoupling in the context of HECO's 2011 rate case."<sup>254</sup>

The Consumer Advocate further points out that "[t]he potential loss of decoupling benefits by the HECO Companies, should they fail to perform reasonably relative to commitments

---

<sup>252</sup>Id. at 8.

<sup>253</sup>Id. at 9.

<sup>254</sup>Id. at 9-10.

made in the Agreement, will serve as a strong incentive for such performance.”<sup>255</sup>

### Findings

The commission finds the Consumer Advocate’s arguments with respect to the inclusion of a clean energy performance metric in the HECO Companies’ decoupling mechanism to be more persuasive than the arguments raised by the other Parties, and that the record in this docket does not support the inclusion of a fully developed performance metric in the HECO Companies’ decoupling mechanism at this time. The commission finds that the Amended Joint Proposal contains provisions for a report on the status of certain HCEI initiatives that will be subject to discovery and analysis by the Consumer Advocate and other parties and will serve to hold the HECO Companies sufficiently accountable for their performance relative to RPS objectives and their other commitments in support of clean energy, at least until decoupling is reviewed in the HECO Companies’ next round of rate cases. The commission finds that the potential loss of decoupling benefits by the HECO Companies, should they fail to perform reasonably relative to commitments made in the Energy Agreement, will serve as an incentive for such performance. Accordingly, the commission declines to adopt a clean energy

---

<sup>255</sup>Id. at 10.

performance metric for the HECO Companies at this time. The commission acknowledges, however, that it is important to have clearly defined objectives and measurements of success. Therefore, in future reviews of the effectiveness of decoupling and its relationship with Hawaii's clean energy initiatives, the concept of performance metrics should be appropriately investigated to allow the commission to consider the need for such metrics in the future.

b.

Earnings Sharing Revenue Credit Mechanism

In recognition that ROEs may fluctuate during the period between rate cases due to expense variability and changing rate base values, and out of concern that the combined effect of multiple revenue adjustments mechanisms such as the ECAC, IRP/DSM surcharges, renewable energy infrastructure ("REI")/clean energy infrastructure ("CEI") surcharges and the proposed PPAC may produce excessive earnings, the Consumer Advocate and the HECO Companies have proposed as part of their joint proposal the establishment of Earnings Sharing Revenue Credits that ensure that customers also benefit from any earnings experienced by the HECO Companies' shareholders above their authorized ROEs. In the event the RAM formula proves to be overly generous in estimating changes in revenue requirement,

earnings sharing serves as an important consumer safeguard. On the other hand, by "sharing" in excessive earnings, an incentive is retained for utility management to minimize costs in an effort to maximize earnings that can be shared with investors. Under the Amended Joint Proposal, earnings sharing amounts will be returned to customers as credits through the RBA so as to implement the earnings sharing percentages and procedures described in the RAM Provision.<sup>256</sup>

As discussed above, the Amended Joint Proposal includes an Earnings Sharing Revenue Credit mechanism. According to the HECO Companies, the earnings sharing mechanism serves to: (1) provide a backdrop for the uncertainty associated with implementation of the Joint FSOP sales decoupling proposal; (2) prevent excessive cumulative cost recoveries (i.e., excessive revenues) under sales decoupling and the various new surcharge mechanisms envisioned by the Energy Agreement; (3) provide a periodic filing under the RAM as an aid to regulatory understanding of whether the RAM is reasonably balancing the interests of the utilities and ratepayers; and (4) explicitly reward utility performance with a sharing of any higher returns on investment if costs are successfully contained below RAM

---

<sup>256</sup>See HECO Opening Brief at 35-36; HECO Reply Brief at 52. For the proposed earnings sharing grid, refer to the discussion above, in Section II.B.3.a of this Decision and Order, regarding RAM Details.

escalation rate expectations.<sup>257</sup>

All of the Parties appear to support the earnings sharing mechanism. As noted by the Consumer Advocate:

Any excessive earnings that may result from mis-specification of RAM inputs is self correcting in the short run through the earnings reporting and sharing provision which provides the HECO Companies a limited incentive to outperform inflation indices in the short term. Notably, the earnings sharing provision is not symmetrical, so ratepayers will be credited with a share of any above-authorized ROE that is achieved, while the HECO Companies cannot collect any additional revenues if its achieved ROE is less than authorized.<sup>258</sup>

DBEDT lists "the inclusion of an earnings-sharing mechanism in the RAM design" among a list of provisions that DBEDT maintains will "balance the benefits to the utility with consumer protection and benefits . . . ."<sup>259</sup>

"HDA supports the ROE sharing mechanism proposed by the Consumer Advocate and now incorporated in the RAM."<sup>260</sup> HREA joins in HDA's position.<sup>261</sup>

Blue Planet states that "[i]t is appropriate for Return on Equity ('ROE') sharing, as proposed in the Joint Decoupling

---

<sup>257</sup>HECO Opening Brief at 45; HECO Reply Brief at 52.

<sup>258</sup>Consumer Advocate Opening Brief at 33.

<sup>259</sup>DBEDT Opening Brief at 54.

<sup>260</sup>HDA Opening Brief at 23.

<sup>261</sup>See HREA Joinder at 1.

Proposal, to be incorporated into any RAM adopted by the Commission.”<sup>262</sup> HSEA joins in Blue Planet’s position.<sup>263</sup>

### Findings

Based on the record in this docket, in which all Parties are in agreement as to this issue, the commission finds that the Earnings Sharing Revenue Credit mechanism included in the Amended Joint Proposal and reflected in the RAM Provision will allow both the HECO Companies and their customers to benefit from any earnings experienced by the HECO Companies’ shareholders above the utilities’ authorized ROEs. Accordingly, the commission finds that the earnings sharing mechanism will result in just and reasonable rates, and should be implemented.

c.

### Credit Mechanism for Major and Baseline Capital Projects

In the Joint FSOP and as described above, the HECO Companies and Consumer Advocate proposed to include major capital projects that are expected to be placed into service in the first nine months of the RAM year. The Amended Joint Proposal includes a refund condition in instances where Major Capital Project cost overruns may be subsequently disallowed when reviewed in a rate case, and the wording in the RAM

---

<sup>262</sup>Blue Planet Opening Brief at 11.

<sup>263</sup>See HSEA Joinder at 1.

Provision was revised to incorporate the Major Capital Projects Credits provision.<sup>264</sup> None of the Parties objected to this provision.

In support of this mechanism, the HECO Companies noted in their Opening Brief that:

As major projects might experience delays in completion due to a variety of reasons, the Major Capital Projects Credit mechanism would refund ratepayers with interest for major capital projects originally included in the rate base RAM calculation but were subsequently placed into service after the first nine months of the RAM year. This provides a safeguard for ratepayers in having to pay for capital projects which have not been placed into service in the first nine months as initially projected in the RAM year.<sup>265</sup>

The RAM Provision also includes expanded rate base RAM language to state that the companies will refund (with interest) RAM revenues associated with any subsequently disallowed costs for Baseline Capital Projects (i.e., projects estimated to cost less than \$2.5 million).<sup>266</sup> With the revision, called the Baseline Capital Projects Credits, if Baseline Capital Project costs are disallowed to a point where the total amount of Baseline Capital Projects' costs are below what was estimated

---

<sup>264</sup>HECO Memo in Support at 11 (citing HECO Opening Brief at 46); see also Consumer Advocate Opening Brief at 31 (citing the July 13, 2009 Responses).

<sup>265</sup>HECO Opening Brief at 46.

<sup>266</sup>HECO Memo in Support at 12 (citing HECO Opening Brief at 98).

and used to calculate the rate base RAM, the HECO Companies will refund the RAM revenues associated with the difference, with interest.<sup>267</sup> These credit provisions should address any concern that ratepayers might "pay" for projects that have not been reviewed and found to be "prudent".<sup>268</sup>

Also, none of the parties appear to object to the modification for Baseline Capital Projects included in the HECO Companies' Opening Brief. For example, the Consumer Advocate states that, "We concur with this modification . . . and urge its inclusion in the Commission's Final Order."<sup>269</sup> "DBEDT supports the approval of the decoupling mechanism with the above modifications", at least "on an interim basis as proposed in HECO's motion."<sup>270</sup> Neither HDA (in its memorandum in response to the Interim Motion)<sup>271</sup> nor Blue Planet (in its memorandum in partial opposition to the Interim Motion, in which HREA and HSEA

---

<sup>267</sup>A specific adjustment must also be applied to remove any disallowed plant-in-service and related rate base depreciation and deferred tax balances from the recorded balances used in the Rate Base RAM as of the end of the Evaluation Period.

<sup>268</sup>HECO Memo in Support at 12 (citing HECO Opening Brief at 97-98).

<sup>269</sup>Consumer Advocate Reply Brief at 29; see Consumer Advocate Comments at 6.

<sup>270</sup>See DBEDT Reply Brief at 4; see also DBEDT Memo in Support at 2.

<sup>271</sup>See HDA Memo in Response.

join)<sup>272</sup> appear to object to the modification for Baseline Capital Projects either.

### Findings

Based on the record in this docket, the commission finds that the capital project credit mechanisms included in the Amended Joint Proposal will help to address any concern that under the proposed decoupling mechanism, ratepayers might be required to pay for the costs of projects that would otherwise be disallowed by the commission. The provisions ensure that any disallowance of excessive project costs or any premature inclusion of major projects in the RAM will be remedied through subsequent refunds with interest. Accordingly, the commission finds that the credit mechanisms for Major Capital Projects and Baseline Capital Projects that are included in the Amended Joint Proposal will result in just and reasonable rates, and should be implemented as reflected in the RAM Provision tariff.

d.

### Service Quality Metric

Through IRs and during the panel hearings, questions were raised as to whether, under decoupling, the HECO Companies will have an adequate incentive to maintain their facilities or make repairs in a timely fashion during outages.

---

<sup>272</sup>See Blue Planet Memo in Partial Opposition; HREA Joinder to Blue Planet Memo; HSEA Joinder to Blue Planet Memo.

In their responses to PUC-IR-2<sup>273</sup> and PUC-IR-37,<sup>274</sup> the HECO Companies pointed out that: (1) service quality provisions are not commonly found in revenue decoupling plans; (2) a utility's service quality is most likely to be jeopardized when real profits are to be made by cutting line maintenance expenses and other costs of maintaining or improving quality; (3) four years (as opposed to three years, as set forth in the Amended Joint Proposal) is normally considered the threshold term that would qualify an alternative regulation plan to be classified as an example of performance-based regulation ("PBR"), with cost containment incentives sufficiently strong to warrant quality concerns; (5) where quality provisions are included in PBR plans, they oftentimes involve only the monitoring of quality and not a program of awards and/or penalties, especially in first generation plans;<sup>275</sup> (6) the earnings sharing mechanism included in the Amended Joint Proposal would weaken incentives

---

<sup>273</sup>PUC-IR-2 requested that the Parties discuss the service quality standards, such as the one mentioned in RAP's Revenue Decoupling- Standards and Criteria for the Minnesota Public Utilities Commission, dated June 30, 2008, which are intended to overcome an indifference to lost services that sales decoupling may create.

<sup>274</sup>PUC-IR-37 requested that the Parties discuss service quality targets that have been used as part of price or revenue cap regulatory paradigms (e.g., Massachusetts).

<sup>275</sup>See HECO Opening Brief at 83-84; see also HECO Reply Brief at 70-71. Following the hearing, the commission again asked how the HECO Companies will address the issue of outages and the target revenues. The HECO Companies responded in Attachment 8 to their July 13, 2009 Responses.

to take extreme cost containment measures that could jeopardize quality;<sup>276</sup> and (7) any service quality standards would have to be tailored to the circumstances of the utilities affected by the standards, in order to avoid unfair or unintended consequences.<sup>277</sup>

Thus, if service quality standards are introduced, the HECO Companies recommended, in their IR responses, starting with service quality monitoring programs that do not involve awards or penalties.<sup>278</sup> Nevertheless, the HECO Companies proposed individual company service quality benchmarks for SAIDI in their opening brief if this alternative is incorporated into the RAM, to address the commission's concerns regarding service reliability if decoupling is implemented.<sup>279</sup>

The Consumer Advocate notes that a problem posed by tying a service quality metric to a RAM is that:

[U]tility spending on new plant investment or O&M does not fall cleanly into categories such as 'reliability' or 'new customers' or 'Act 155

---

<sup>276</sup>See HECO Opening Brief at 85; see also HECO Reply Brief at 71.

<sup>277</sup>See HECO Opening Brief at 86. There are other differentiating factors among the service territories, which have been discussed in service reliability investigations. For example, the larger area of HELCO's service territory, and its lower customer density, affect the travel times (and, thus, the service restoration times) for HELCO service crews. Id. at 86 n.86.

<sup>278</sup>See id. at 86.

<sup>279</sup>See id. at 87-89.

compliance', requiring largely judgmental filtering and classification of potentially thousands of construction projects and O&M expenditures to comply with any prescribed ratemaking formula using these terms. As a consequence, the NRRI alternatives defining eligible RAM transactions lead to substantially increased complexity for the HECO Companies to develop and compile information not typically maintained in the normal course of business.<sup>280</sup>

In its Opening Brief, Blue Planet (joined by HSEA) states that "[u]tility service quality standards should be incorporated as part of any RAM to insure that any measures taken by the HECO Companies to reduce O&M expense escalation and capital expenditures would not adversely affect customer service quality and reliability."<sup>281</sup>

DBEDT's Opening Brief similarly states that "it is equally important and necessary for the consumers' benefit to link the allowed RAM amount to certain service reliability standards . . . ."<sup>282</sup>

DBEDT proposes that for every service interruption lasting longer than the above SAIDI target goals during the year preceding the RAM year, the total target revenue requirements adjustment (excluding O&M labor, fuel and purchased power costs) for the RAM year will be reduced based on the kWh sales that would have been served during the entire outage period. For example, if HECO experienced a service interruption lasting for 120 minutes

---

<sup>280</sup>Consumer Advocate Opening Brief at 26.

<sup>281</sup>Blue Planet Opening Brief at 11.

<sup>282</sup>See DBEDT Opening Brief at 26-27.

during the preceding year, the total RAM revenue requirements adjustment will be reduced by an amount equal to the total adjustment expressed on a per kWh basis for the current RAM year (i.e., calculated total RAM adjustment ÷ estimated kWh for the RAM period) multiplied by the estimate of the kWh lost or kWh not served during the entire service interruption period.<sup>283</sup>

In response to DBEDT's proposal, the HECO Companies maintain that DBEDT has misinterpreted the SAIDI, and that the SAIDI is not representative of any single interruption as DBEDT implies in its proposal above.<sup>284</sup>

Among "several safeguards identified in its recommendations regarding Issue VI in this docket, HDA (joined by HREA) recommends "[c]onsideration of performance incentives to ensure reliable service and diligent implementation of HCEI initiatives",<sup>285</sup> but does not make any specific recommendations with respect to a service reliability metric.

"HREA would agree that some form of a reliability standard would be appropriate . . . . However, HREA does not believe there has been sufficient time in this proceeding to address the issues regarding HECO's specific System Average Interruption Duration Index ('SAIDI') proposal." Thus, "[g]iven the development of reliability standards is to be initiated in

---

<sup>283</sup>Id. at 28.

<sup>284</sup>See HECO Reply Brief at 74.

<sup>285</sup>HDA Opening Brief at 35.

the FiT docket, HREA recommends that consideration of any utility reliability standard with respect to decoupling be postponed pending the outcome of the directed activity on the FiT docket . . . .”<sup>286</sup>

### Findings

Based on the record in this docket, the commission declines to adopt a service quality metric in connection with the decoupling mechanism for the HECO Companies at this time. The commission finds that the record in this proceeding with respect to any service quality metric is not sufficiently developed for the commission to make a determination that it would be reasonable to adopt a service quality metric for the HECO Companies. In addition, the commission agrees with HREA that, in light of the FIT investigation that is ongoing in Docket No. 2008-0273, consideration of any utility reliability standard with respect to decoupling should be postponed pending the outcome in the FIT proceeding.

It should be recognized, however, that the issues of service quality and performance metrics are appropriate issues to be examined in the context of utility regulation. As such, if, in the context of other ongoing or future proceedings or in the evaluation of the effectiveness of decoupling in helping to

---

<sup>286</sup>Hawaii Renewable Energy Alliance’s Post-Hearing Reply Brief,

meet Hawaii's objectives of energy independence it becomes evident that the inclusion of some form of performance metrics might be reasonable and appropriate, the commission will investigate and consider the inclusion of such metrics in the future.

e.

#### On-Going Review of Decoupling

A number of review provisions are included in the Energy Agreement, which provide the commission, the Consumer Advocate and the HECO Companies the ability to review the performance of revenue decoupling and take steps to correct, suspend or terminate the mechanism. These provisions include the following:

- (1) The parties agree that the decoupling mechanism that will be implemented will be subject to review and approval by the commission.
- (2) The commission may review the decoupling mechanism at any time if it determines that the mechanism is not operating in the interests of the ratepayers.
- (3) The utility or the Consumer Advocate may also file a request to review the impact of the decoupling mechanism.
- (4) The commission may unilaterally discontinue the decoupling mechanism if it finds that the public interest requires such action.<sup>287</sup>

---

filed September 29, 2009, para. 2.

<sup>287</sup>Energy Agreement at 33.

"The Consumer Advocate believes that these filing and review procedures and the provisions for open-ended correction of errors and refunds assure that the revenue adjustments arising from decoupling can be reasonably reviewed and regulated."<sup>288</sup> According to the Consumer Advocate, the consumer safeguards included in the decoupling proposal "are integral parts of the Joint FSOP and provide the Commission with a continuing opportunity to monitor and correct problems with administration of the two decoupling tariffs or any inappropriate recovery of costs through the tariffs."<sup>289</sup>

In accordance with the Consumer Advocate's position and as noted above, the Amended Joint Proposal provides that the review of the continuation of the RBA and RAM provisions will be undertaken in the HECO Companies' second round of rate cases, to occur from 2011 through 2013, i.e., where rate cases are filed for test years that are three years apart. This will result in the filing of one rate case per year after the initial round of decoupling, providing for an annual review of the Amended Joint Proposal's decoupling mechanisms.

#### Interim Implementation and Continuation of the Proceeding

At various points in this proceeding, certain parties

---

<sup>288</sup>Consumer Advocate Opening Brief at 32.

<sup>289</sup>Id. at 33.

have expressed support of the continuation of this proceeding beyond the initial implementation of decoupling.

For example, HDA (joined by HREA) recommended that this docket remain open to review the RAM's performance and the impacts on decoupling of decisions made in other HCEI-related dockets, and also to consider requiring the submission of a draft master plan by the end of the first quarter of 2010 in order to understand how the various elements of the Energy Agreement and HCEI initiatives will work together.<sup>290</sup>

Blue Planet's Reply Brief recommends that the commission "consider issuing an interim decision and order" regarding the RBA and RAM, but states that "if the Commission chooses to not adopt the recommendations concerning the PIM, Blue Planet does not support or recommend that the Commission issue an interim order regarding the RBA and RAM . . . ." <sup>291</sup>

In contrast, although the HECO Companies' Opening Brief noted that: (1) the Parties' performance metric-related concerns have been addressed through modifications to the Amended Joint Proposal; and (2) the proper venue to review demand and supply resource elements in the Energy Agreement is not this docket, but rather, in connection with Clean Energy

---

<sup>290</sup>See HDA Opening Brief at 39-42 and n.36.

<sup>291</sup>Blue Planet Reply Brief at 12.

Scenario Planning,<sup>292</sup> the HECO Companies' Interim Motion requested implementation of decoupling on an interim basis and that this proceeding be continued for the primary purpose of evaluating the design and adoption of clean energy-related decoupling performance metrics.<sup>293</sup>

In its Memorandum in Response to the HECO Companies' Interim Motion, HDA notes that the purpose of its recommendation for an interim order was to capture some immediate decoupling benefits, while leaving several more controversial matters for further consideration in a continued proceeding.<sup>294</sup>

DBEDT, in its memorandum in support of the Interim Motion, anticipates that the commission's final decision and order in this docket will resolve issues relating to -

the final form of a decoupling mechanism; the linking of the RAM component to a performance metric; the ECAC-related issues; inclusion of service reliability standards (SAIDI); the determination of the major capital projects to include in the rate base RAM component; the use of the authorized labor O&M costs (unadjusted) in determining the O&M component of RAM; and the review and evaluation process for the decoupling mechanism that may be adopted and approved by the Commission in this docket.<sup>295</sup>

---

<sup>292</sup>See HECO Memo in Support at 17; see also Docket No. 2009-0108.

<sup>293</sup>See Interim Motion at 2-3; HECO Memo in Support at 19-20.

<sup>294</sup>See HDA Memo in Response at 3.

<sup>295</sup>DBEDT Memo in Support at 3.

Blue Planet (joined by HREA and HSEA), in its memorandum in partial opposition to the Interim Motion, states that "Blue Planet opposes the Motions' request only insofar as it proposes that the Commission make no further decision on the RAM in this proceeding." <sup>296</sup>

In response to the HECO Companies' Interim Motion, the Consumer Advocate states that "[t]he Division does not agree with HECO's proposal to continue this Docket so as to hold additional workshops and statements of position by the parties."<sup>297</sup> Rather, the Consumer Advocate states:

A detailed and complete record now exists and has been briefed in this Docket and the Commission has been fully advised of the advantages and disadvantages of decoupling at the broad policy level, as well as in the fine points of tariff language. The existing record is supportive of the issuance of a Final Order in favor of decoupling, approving the tariffs needed to implement decoupling.

\* \* \*

No purpose will be served by adding more workshops and statements of position, as now proposed by HECO, in an apparent search to find consensus regarding performance measures. HECO has made no showing that the cost and burden of continuation of these proceedings will produce either consensus regarding HCEI performance measures or any more reasonable financial outcome than would result

---

<sup>296</sup>Blue Planet Memo in Partial Opposition at 2.

<sup>297</sup>Consumer Advocate Comments at 3 (emphasis in original).

from Commission approval of the JFSOP with its next rate case review of HECO performance.<sup>298</sup>

The Consumer Advocate notes that:

The procedural schedule in Docket No. 2008-0274 did not provide for interim implementation of decoupling or for any continuation of these proceedings after the close of hearings. The procedural schedule that was approved has been completed except for the issuance of the Commission's Order.<sup>299</sup>

According to the Consumer Advocate:

HECO's limited control over many of those processes and the existence of Renewable Portfolio Standards with penalty provisions supports a conclusion that the most appropriate forum for detailed analysis of RPS performance is within the next HECO rate case, at which time actual facts and performance can be analyzed without speculation regarding what level of performance should be expected.<sup>300</sup>

In addition, the Consumer Advocate states that:

Of course, it is nearly impossible at this time to predict the timing and outcomes for all of the regulatory provisions, technical and siting/interconnection issues and developer financial challenges that will influence the pace of actual renewable energy project completion and "procurement" by HECO. In this vacuum of accurate foresight, any implementation of potentially large RAM financial penalties to HECO if it should fail to achieve 40 MW by December 2010 is highly speculative. If fact, such penalties may incent HECO toward an unreasonably accommodative posture in negotiation of PPA terms, from which costs may

---

<sup>298</sup>Id. at 4.

<sup>299</sup>Id. at 4 (emphasis in original).

<sup>300</sup>Id. at 6.

flow through the proposed Purchased Power Adjustment mechanism, to the immediate and long-term advantage of ratepayers.<sup>301</sup>

### Findings

Based on the record in this docket, the commission finds the Consumer Advocate's arguments with respect to the ongoing review of decoupling to be more persuasive than the arguments raised by the other Parties. The commission finds that it would not be appropriate to issue an interim order in this docket at this time, as a detailed and complete record now exists that is supportive of the issuance of a final decision and order in this proceeding. Also, as stated above, decoupling and its mechanisms are subject to review and continuation in the HECO Companies' next round of rate cases. HECO has stated that it will file a 2011 test year rate case, which would need to be filed within less than a year's time.<sup>302</sup> By the time that the rate case application is reviewed, the ratepayers, the HECO Companies and the commission will have gained some working experience with decoupling in its proposed form. Given that further reviews of decoupling will be conducted in the HECO Companies' future rate case dockets, the commission finds that continuing the instant proceeding in parallel with those dockets

---

<sup>301</sup>Id. at 9.

<sup>302</sup>See HAR § 6-61-87.

would result in an inefficient use of commission resources.

Accordingly, for the aforementioned reasons, the HECO Companies' Interim Motion is denied, except for those provisions agreed to by the Consumer Advocate and included in the Amended Joint Proposal.

In addition, the commission finds that the provisions for the ongoing review of decoupling that are included in the Amended Joint Proposal (i.e., in the HECO Companies' future rate cases) will provide the commission with an adequate, reasonable and continuing opportunity to monitor and correct problems with administration of the decoupling mechanisms approved in this Decision and Order. The commission agrees with the Consumer Advocate that the HECO Companies' next round of rate cases<sup>303</sup> will present a more appropriate forum than this docket for further analysis of the HECO Companies' RPS performance. Accordingly, the commission declines to adopt the recommendations for the continuation of these proceedings beyond the commission's initial approval of decoupling in this Decision and Order.

---

<sup>303</sup>HECO has explicitly stated its intent to file a 2011 test year rate case which will presumably be filed within this year. The HECO Companies have also stated that the next round of MECO and HELCO rate cases are planned to be filed for test years 2012 and 2013, but have not indicated which company will file in 2012, or which company will file in 2013.

### III.

#### ULTIMATE FINDINGS OF FACT AND CONCLUSIONS OF LAW

The commission makes the following findings of fact and conclusions of law.

1. The Amended Joint Proposal for the implementation of decoupling by the HECO Companies, as set forth in Exhibits 1-7 hereto, is reasonable.

2. Decoupling will help to achieve Hawaii's objectives by resulting in just and reasonable rates, administrative efficiency and protection of the HECO Companies' financial health as Energy Agreement implementation occurs.

3. Sales decoupling, as implemented by the HECO Companies through the proposed RBA Provision, is reasonable, will contribute to the achievement of Hawaii's objectives and should be implemented.

4. The RAM Provision, as included in the Amended Joint Proposal, is reasonable, will contribute to the achievement of Hawaii's objectives and should be implemented.

5. The RPC mechanism and other RAM alternatives considered in this docket but not included in the Amended Joint Proposal would not achieve Hawaii's objectives as well as the RBA and RAM Provisions included in the Amended Joint Proposal.

6. The proposals included in the Amended Joint Proposal concerning the application of deadbands around the HECO Companies' ECAC sales heat rates, and the proposed process for redetermining the HECO Companies' Target Heat Rates, are reasonable.

7. The provisions for the ongoing review of and safeguards for decoupling that are included in the Amended Joint Proposal are reasonable.

8. The record in this docket does not support the inclusion of a clean energy performance metric or a service quality metric in the HECO Companies' decoupling mechanism.

9. It would not be appropriate to issue an interim order in this docket at this time, as a detailed and complete record now exists that is supportive of the issuance of a final decision and order in this proceeding.

#### IV.

#### ORDERS

##### THE COMMISSION ORDERS:

1. The HECO Companies shall implement decoupling as set forth in the Amended Joint Proposal.

2. HECO's RBA and RAM Provisions, as substantively set forth in Exhibits 1 and 2 hereto, shall be filed on March

31, 2010, and be effective on June 1, 2010, subject to the notice and evaluation procedures set forth in the RAM Provision.

3. MECO and HELCO's RBA and RAM Provisions, as substantively set forth in Exhibits 3 and 4 hereto, and Exhibits 5 and 6 hereto, respectively, shall be filed and effective as of the effective dates of the interim rate orders to be issued in the MECO and HELCO 2010 test year rate cases, Docket Nos. 2009-0163 and 2009-0164, respectively.

4. The HECO Companies shall file a reporting of their performance relative to the clean energy goals and objectives set forth in the Energy Agreement as part of the next round of rate case filings, commencing with the anticipated HECO 2011 test year filing, with such reporting to serve, in part, as a basis for review and possible termination, modification or continuation of the decoupling provisions ordered herein.

5. As proposed in the Amended Joint Proposal, and set forth in Exhibit 7 hereto, the deadband around HECO's ECAC sales heat rates, as proposed in the Amended Joint Proposal is approved, and shall be applied upon the issuance of a final decision and order in Docket No. 2008-0083.

6. As proposed in the Amended Joint Proposal, and set forth in Exhibit 7 hereto, the deadbands around the respective ECAC sales heat rates for MECO and HELCO, as proposed

in the Amended Joint Proposal, are approved, and shall be applied on and after the effective dates of the interim decision and orders to be issued in Docket Nos. 2009-0163 and 2009-0164.

7. As proposed in the Amended Joint Proposal, and set forth in Exhibit 7 hereto, the process for redetermining the HECO Companies' Target Heat Rates is approved, coincident with the application of the HECO Companies' respective ECAC deadbands.

8. The regulatory relief granted to the HECO Companies in this Decision and Order may impact the business risks faced by the HECO Companies. Consideration of this impact will be addressed within the pending rate cases of each utility, where utility authorized rates of return will be determined.

9. The HECO Companies' Interim Motion is denied as moot.

DONE at Honolulu, Hawaii \_\_\_\_\_.

PUBLIC UTILITIES COMMISSION OF THE  
STATE OF HAWAII

By: \_\_\_\_\_  
Carlito P. Caliboso, Chairman

By: \_\_\_\_\_  
John E. Cole, Commissioner

By: \_\_\_\_\_  
Leslie H. Kondo, Commissioner

APPROVED AS TO FORM:

\_\_\_\_\_  
Kaiulani Kidani Shinsato  
COMMISSION COUNSEL

CERTIFICATE OF SERVICE

The foregoing order was served on the date of filing by mail, postage prepaid, and properly addressed to the following parties:

Mr. Dean Nishina  
Executive Director  
Department of Commerce & Consumer Affairs  
Division of Consumer Advocacy  
P.O. Box 541  
Honolulu, HI 96813

Mr. Dean K. Matsuura  
Director-Regulatory Affairs  
Hawaiian Electric Company, Inc.  
P. O. Box 2750  
Honolulu, HI 96840-0001

Warren S. Bollmeier II  
PRESIDENT  
HAWAII RENEWABLE ENERGY ALLIANCE  
46-040 Konane Place, #3816  
Kaneohe, HI 96744

Mr. Carl Freedman  
HAIKU DESIGN & ANALYSIS  
4234 Hana Highway  
Haiku, HI 96708

Gerald A. Sumida, Esq.  
Tim Lui-Kwan, Esq.  
Nathan C. Smith, Esq.  
Carlsmith Ball LLP  
ASB Tower, Suite 2200  
1001 Bishop Street  
Honolulu, HI 96813

Attorneys for HAWAII HOLDINGS, LLC, dba FIRST WIND HAWAII

Mr. Gregg J. Kinkley, Esq.  
Attorney General, State of Hawaii  
425 Queen Street  
Honolulu, HI 96813

Attorney for the DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT, AND TOURISM

Mr. Mark Duda  
President  
Hawaii Solar Energy Association  
P.O. Box 37070  
Honolulu, HI 96837

Douglas A. Codiga, Esq.  
Schlack Ito Lockwood Piper & Elkind  
Topa Financial Center, Fort Street Tower  
745 Fort Street, Suite 1500  
Honolulu, HI 96813

Attorney for BLUE PLANET FOUNDATION

SHEET NO.  
Effective

## REVENUE BALANCING ACCOUNT ("RBA") PROVISION

## Supplement To:

Schedule R - Residential Service  
Schedule E - Electric Service For Employees  
Schedule G - General Service Non-Demand  
Schedule J - General Service Demand  
Schedule H - Commercial Cooking, Heating, Air  
Conditioning, and Refrigeration Service  
Schedule PS - Large Power Secondary Voltage Service  
Schedule PP - Large Power Primary Voltage Service  
Schedule PT - Large Power Transmission Voltage Service  
Schedule F - Public Street Lighting, Highway Lighting  
and Park and Playground Floodlighting  
Schedule U - Time of Use Service  
Schedule TOU-R - Residential Time-of-Use Service  
Schedule TOU-C - Commercial Time-of-Use Service  
Schedule SS - Standby Service

All terms and provisions of Schedules R, E, G, J, H, PS, PP, PT, F, U, TOU-R, TOU-C, and SS are applicable except that the total base rate charges for each billing period shall be adjusted by the Revenue Balancing Account Rate Adjustments shown below:

## A: PURPOSE:

The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Hawaiian Electric Company's (HECO's) target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery of the RAM Revenue Adjustment provided in the Rate Adjustment Mechanism ("RAM") Provision over the subsequent June 1<sup>st</sup> through May 31st period. Tracking of target revenue and recorded adjusted revenue commenced on February 20, 2010 pursuant to the Commission Order filed February 19, 2010 in Docket No. 2008-0274, but commencing one day subsequent to align with the effective date of the tariff that implemented the Second Interim Decision and Order in HECO's 2009 test year rate case, Docket No. 2008-0083.

## B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the most recent Authorized Base Revenue approved by the Public Utilities Commission (PUC), plus or minus the RAM Revenue Adjustment calculated under the RAM Provision, adjusted to remove amounts for applicable revenue taxes. The target revenue will exclude revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause and all revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism.

SHEET NO. \_\_\_\_\_  
 Effective \_\_\_\_\_

### REVENUE BALANCING ACCOUNT ("RBA") PROVISION

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment for any previous period to the extent that such errors are identified 15 days prior to the Annual implementation date specified in the RAM Provision.

Monthly Allocation Factors for the Target Revenue are as follows:

January	7.98%
February	7.30%
March	8.04%
April	7.87%
May	8.34%
June	8.36%
July	8.69%
August	9.05%
September	8.80%
October	8.90%
November	8.33%
December	8.34%
Total	100.00%

These factors are based on the mWh sales forecast approved by the Commission in HECO's test year 2009 rate case and shall be updated in any subsequent test year rate case.

#### C: BALANCING ACCOUNT ENTRIES:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

Interest will be recorded monthly to the RBA by multiplying the simple average of the beginning and ending month balance in the RBA times the Interest Rate divided by 12. The Interest Rate shall be 6 percent.

#### D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

At the Annual Evaluation Date provided in the Rate Adjustment Mechanism Provision, the Company will file with the Commission a statement of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations. Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits or Baseline Capital Projects Credits, and the RAM Revenue Adjustment will be

HAWAIIAN ELECTRIC COMPANY, INC.

SHEET NO. \_\_\_\_\_  
 Effective \_\_\_\_\_

# REVENUE BALANCING ACCOUNT ("RBA") PROVISION

recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the current calendar year to May 31 of the succeeding calendar year.

## E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT:

The RBA rate adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes. The RBA rate adjustment is calculated based on the Company's forecast of mWh sales over the RBA rate adjustment recovery period.

Effective June 1, 2010 to May 31, 2011

## RBA Rate Adjustment

All Rate Schedules .....	¢/kWh
--------------------------	-------

REVISED SHEET NO. \_\_\_\_  
Effective

## RATE ADJUSTMENT MECHANISM PROVISION

### Rate Adjustment Mechanism ("RAM") Provision

#### Purpose

This mechanism is subject to review and continuation, termination or modification in the utility's next base rate case proceeding, upon a showing by the utility and finding by the Commission that continuation or modification is appropriate. As part of its submitted testimony in the base rate case, the Company will include a summary report on the status of certain HCEI initiatives. The RAM mechanism is designed to determine the change in annual utility base revenue levels, recognizing certain estimated changes in the utility's cost to provide service. If, through the application of this mechanism, it is determined that annual utility base revenues should be decreased or increased, then the RAM Revenue Adjustment will be applied within the Revenue Balancing Account Provision. The RAM Revenue Adjustment established for RAM Period calendar year 2011 shall remain in effect until the Commission approves a base revenue level in the Company's 2011 test year rate application.

#### Definitions

- a) The **Annual Evaluation Date** shall be the Date the Company will make its annual filing under this mechanism. The Annual Evaluation Date shall be no later than March 31, of each year commencing March 31, 2010.
- b) The **Evaluation Period** is defined as the historical twelve month period ending December 31, of each calendar year preceding the Annual Evaluation Date. The Evaluation Period is used solely to determine achieved earnings and any sharing of such earnings above the Authorized Return on Equity.
- c) The **RAM Period** is defined as the calendar year containing the Annual Evaluation Date.
- d) The **Labor Cost Escalation Rate** shall be the applicable annual percentage general wage rate increase provided for in  
HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

## RATE ADJUSTMENT MECHANISM

currently effective union labor agreements for use in escalating wage and salary Base Expenses for both union and non-union employees to determine the RAM Revenue Adjustment for each RAM Period. In the event no union labor agreement exists for a RAM Period, the most recently effective annual general percentage increase rate shall apply.

e) The **Non-labor Cost Escalation Rate** shall be the consensus estimated annual change in the Gross Domestic Product Price Indicator ("GDPPI") to escalate non-labor Base Expenses to determine the RAM Revenue Adjustment for each RAM Period. The GDPPI escalation rate shall be the consensus projection published by the Blue Chip Economic Indicators (Aspen Publishing) each February for the current Rate Adjustment Period. In the event that the Blue Chip Economic Indicators forecast of the GDPPI is not available, the Consumer Advocate, Company, and other parties to the most recent rate case, with approval of the Commission, shall jointly select an alternative data source, or national economic index similar to GDPPI, as appropriate.

f) The annual **Labor Productivity Offset** shall be fixed at 0.76 percent (76/100 of one percent) and will be subtracted from the Labor Cost Escalation Rates applicable to Base Expenses to determine the authorized RAM Revenue Adjustment for each RAM Period.

g) The **Base Expenses** shall be the labor and non-labor operations and maintenance expense amounts approved by the Commission in the most recently completed rate case where the test year was the Evaluation Period, or alternatively as approved by the Commission for the immediately preceding year Rate Adjustment Mechanism results if the Evaluation Period was not a test year. Base Expenses shall not include any fuel, purchased power, IRP/DSM, pension, Other Post Employment Benefits ("OPEB"), or Clean Energy/Renewable Energy Infrastructure costs that are subject to recovery through separate rate tracking mechanisms.

h) The **Major Capital Projects** shall be those capital investment projects that require application and Commission

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

## RATE ADJUSTMENT MECHANISM PROVISION

approval under the Commission's General Order No. 7, but excluding those projects included in the Clean Energy Infrastructure Surcharge.

i) The **Baseline Capital Projects** shall be the total amounts of capital investment completed and closed to Plant in Service, excluding amounts related to Major Capital Projects.

j) The **Return on Investment** shall be the overall weighted percentage rate of return on debt and equity capital approved by the Commission in the most recently completed rate case.

k) The **Authorized Return on Equity** shall be the overall weighted percentage rate of return on equity capital approved by the Commission in the most recently completed rate case.

l) The **Exogenous Tax Changes** shall be the changes in tax laws or regulations that are estimated to impact Authorized Base Rate Revenues by two million dollars (\$2,000,000) or more.

m) The **Rate Base** shall be the average net investment estimated for the RAM Period, including each of the elements of rate base reflected within the most recent rate case Decision & Order issued by the Commission, quantified in the manner prescribed in part (f) of Section 2 of the Rate Adjustment Mechanism.

n) The **Authorized Base Revenue** shall be the annual amount of revenue required for the utility to recover its estimated Operations & Maintenance, Depreciation, Amortization and Tax expenses for the RAM Period, as well as the Return on Investment on projected Rate Base for the RAM Period, using the ratemaking conventions and calculations reflected within the most recent rate case Decision & Order issued by the Commission, quantified in the manner prescribed herein.

o) The **RAM Revenue Adjustment** shall be the difference between the calculated Authorized Base Revenue for the RAM Period and either: 1) the previous year's calculated Authorized Base Revenue; or 2) the revenue requirement approved by the Commission in an interim or final decision in the Company's general rate case, whichever is more recent. The RAM Revenue

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

#### RATE ADJUSTMENT MECHANISM

Adjustment determined by this RAM Provision is to be recovered through the RBA Provision commencing on June 1 and over the subsequent 12 months after June 1.

p) **Earnings Sharing Revenue Credits** shall be the amounts to be returned to customers as credits through the Revenue Balancing Account ("RBA") Provision, so as to implement the earnings sharing percentages and procedures described herein, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

q) **Major Capital Projects Credits** shall be the amounts to be returned to customers through the Revenue Balancing Account Provision, to reduce the preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific major capital projects that were not placed into service within the first nine months of the preceding RAM Period as expected. Because the Commission's review of the Major Capital Projects' actual costs incurred may not occur until the rate case after the RAM Revenue Adjustment for these Major Capital Projects is collected, Major Capital Projects Credits (including interest) will be returned to customers for the amount of Major Capital Projects costs that the Commission disallows for cost recovery. The Major Capital Projects Credits are to be refunded through the RBA Provision, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

r) **Baseline Capital Projects Credits** shall be the amounts to be returned to customers through the RBA Provision, to reduce the preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific baseline capital projects that are disallowed by the Commission in a subsequent rate case if the disallowance reduces actual Baseline Capital Projects costs below the Baseline Capital Projects cost estimate derived using the method identified in part (f)ii. of Section 2 of the Rate Adjustment Mechanism below. Because the Commission's review of baseline capital projects may not occur until the rate case after such baseline capital projects are included in one or more RAM Revenue Adjustment filings, Baseline Capital Projects Credits shall be used to refund to customers

HAWAIIAN ELECTRIC COMPANY, INC.

REVISED SHEET NO. \_\_\_\_  
Effective

#### RATE ADJUSTMENT MECHANISM PROVISION

any prior collections (i.e., Return on Investment on Rate Base and Depreciation, plus interest) relating to the amount of Baseline Capital Projects costs that the Commission subsequently disallows for cost recovery. The Baseline Capital Projects Credits are to be refunded through the RBA Provision, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

#### Rate Adjustment Mechanism

The Company shall file with the Commission, the Consumer Advocate and each party to the Company's most recent rate case proceeding, the schedules specified below:

#### Evaluation Period Earnings Sharing:

1. For the twelve month period ending December 31, of each year (the "Evaluation Period"), with the filing to be made no later than March 31, of the year following the conclusion of the Evaluation Period. The schedules will include the following:
  - a) Company's recorded actual average net plant in service, accumulated deferred income taxes, inventory, working capital, and other rate base components. The schedules shall also show the utility's depreciation expense, operating and maintenance expense, income taxes, taxes other than income taxes, and other components of income for return, revenues, and capital structure, cost of debt, overall cost of capital, and return on common equity in the format set forth in the final order establishing the Company's latest effective rates.
  - b) All applicable accounting and pro forma adjustments historically required in annual reports filed with the Commission.
  - c) Pro-forma adjustments to remove from recorded revenues any out-of-period Earnings Sharing Revenue Credits or

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

### RATE ADJUSTMENT MECHANISM

Major Capital Projects Credits recorded during the Evaluation Period, and

- d) A calculation comparing the achieved return on average common equity to the following earnings sharing grid, and indicating the Earnings Sharing Revenue Credit that should be recorded within the Revenue Balancing Account to effect the prescribed sharing of earnings above authorized levels:

ROE at or below the Authorized ROE	Retained entirely by shareholders - no customer credits
First 100 basis points (one percent) over Authorized ROE	25% share credit to customers
Next 200 basis points (two percent) over Authorized ROE	50% share credit to customers
All ROE exceeding 300 basis points (three percent) over Authorized ROE	90% share credit to customers

RAM Period RAM Revenue Adjustment:

- 2) The Company shall provide additional schedules indicating the following proposed RAM Revenue Adjustment calculations applicable for the RAM Period using the methodology set forth below:
- a) The Base Expenses shall be segregated between labor and non-labor amounts and treated as follows:
- i. The labor component shall be quantified for the RAM Period by application of the Labor Cost Escalation Rate, reduced to account for the Productivity Offset to labor expenses.
  - ii. The Non-labor components quantified for the RAM Period by application of the Non-labor Escalation Rate.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

## RATE ADJUSTMENT MECHANISM PROVISION

- iii. Tracked O&M expenses for fuel, purchased power, pension/OPEBs, IRP/DSM or other rate adjustment provisions are to be carried forward for the RAM Period at the fixed amounts established in the most recent rate case proceeding.
- b) Depreciation and amortization expenses shall be quantified for the RAM Period by application of Commission-approved accrual rates to the actual recorded Plant in Service balances at the end of the Evaluation Period.
- c) The Authorized Base Revenue required for Rate Base shall be determined by multiplying the applicable Return on Investment percentage rate times Rate Base. The Authorized Base Revenue associated with return on investment shall include related income taxes on the equity components of such return. The quantification of Rate Base is specified in greater detail in part (f) of this Section 2.
- d) The Authorized Base Revenue impact of any Exogenous Tax Changes shall be included in the RAM Period calculation of Authorized Base Revenues.
- e) Revenue taxes shall be adjusted to account for the change in parts (a) through (d) of this Section 2.
- f) Rate Base for the RAM Period shall be quantified as follows:
  - i. Plant in Service, Accumulated Depreciation, Accumulated Deferred Income Taxes and Contributions in Aid of Construction ("CIAC") shall be a two-point average of actual recorded balance sheet data at December 31 of the Evaluation Period, plus projected values at December 31 of the RAM Period determined as prescribed in parts (ii) through (v), below.
  - ii. Plant in Service shall be quantified by adding to the recorded balances at December 31 of the Evaluation Period, the simple average of Baseline Capital Projects plant additions recorded in the immediately preceding five calendar years, plus the estimated cost of completed Major Capital Projects that are anticipated to be in service by September 30 of the RAM Period. The cost of

HAWAIIAN ELECTRIC COMPANY, INC.

REVISED SHEET NO. \_\_\_\_  
Effective

## RATE ADJUSTMENT MECHANISM

Major Capital Projects shall be limited to the dollar amounts previously approved by the Commission.

- iii. Accumulated Depreciation at December 31 of the RAM Period shall be quantified by increasing the recorded balances at December 31 of the Evaluation Period by the amount set forth in Section 2 part (b) above.
- iv. CIAC shall be quantified by adding to the recorded balance at December 31 of the Evaluation Period an estimate of the net change for the RAM Period. The net change shall be based on a simple average of cash and in-kind CIAC for the immediately preceding five calendar years for programs (i.e., numerous low cost capital projects) plus specific engineering estimates of any contributions for the Major Capital Projects anticipated to be in service by September 30 of the RAM Period.
- v. Accumulated Deferred Income Taxes shall be quantified by adding to the recorded balances at December 31 of the Evaluation Period the estimated tax effect of the depreciation timing difference (i.e., difference between book depreciation and tax depreciation) on the Baseline Capital Projects and Major Capital Projects added to rate base during the RAM Period.
- vi. Working Cash and all other elements of rate base not specifically addressed above shall be fixed at the dollar amount approved by the Commission in the last rate case Decision & Order. These elements of rate base shall be held constant until revised by a Commission Decision & Order in a subsequent general rate case.

HAWAIIAN ELECTRIC COMPANY, INC.

REVISED SHEET NO. \_\_\_\_  
Effective

## RATE ADJUSTMENT MECHANISM PROVISION

### Evaluation Procedures

Complete, indexed workpapers and electronic files supporting the RAM Adjustment Schedules shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding, coincident with the date of filing. The Company will be prepared to provide supplemental information as may be requested to ensure adequate review by the Commission, Consumer Advocate or other parties. The Consumer Advocate and the other parties may propose any adjustments determined to be required to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments. As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate or other parties not later than 15 days before the June 1 effective date of the RBA Rate Adjustments described in the RBA Provision tariff, the RBA Rate Adjustments incorporating the RAM Revenue Adjustment shall go into effect on the June 1 effective date and the Commission shall confirm in its monthly Tariff Order the effectiveness of the Company's proposed tariff, so as to achieve the revenue levels approved for both the Evaluation Period and RAM Period.

### Notice

Notice of the annual Rate Adjustment Mechanism filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 30 days and by including notification with its billing statements within 60 days after the Company makes its annual filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues and Earnings sharing credits;

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM

- b) The effect of the proposed RAM Revenue Adjustment on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed RAM Revenue adjustment may be obtained.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. .

SHEET NO.  
Effective

## REVENUE BALANCING ACCOUNT ("RBA") PROVISION

## MAUI, LANAI, and MOLOKAI DIVISIONS

## Supplement To:

Schedule R - Residential Service  
Schedule E - Electric Service For Employees  
Schedule G - General Service Non-Demand  
Schedule J - General Service Demand  
Schedule H - Commercial Cooking, Heating, Air Conditioning,  
And Refrigeration Service  
Schedule P - Large Power Service  
Schedule N - Contract Off-Peak and Interruptible Service  
Schedule F - Street Light Service  
Schedule U - Time of Use Service  
Schedule SS - Standby Service

All terms and provisions of Schedules R, E, G, J, H, P, N, F, U, and SS are applicable except that the total base rate charges for each billing period shall be adjusted by the Revenue Balancing Account Rate Adjustments shown below:

## A: PURPOSE:

The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Maui Electric Company's (MECO's) target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery of the RAM Revenue Adjustment provided in the Rate Adjustment Mechanism ("RAM") Provision over the subsequent June 1<sup>st</sup> through May 31<sup>st</sup> period. A single RBA will be established to be applicable to all of MECO's divisions. Tracking of target revenue and recorded adjusted revenue will commence on the effective date of the tariff that implements the Interim Decision and Order in MECO's 2010 test year rate case, Docket No. 2009-0163.

## B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the most recent Authorized Base Revenue approved by the Public Utilities Commission (PUC), plus or minus the RAM Revenue Adjustment calculated under the RAM Provision, adjusted to remove amounts for applicable revenue taxes. The target revenue will exclude revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause and all revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment for any previous period to

SHEET NO. \_\_\_\_\_  
 Effective \_\_\_\_\_

# REVENUE BALANCING ACCOUNT ("RBA") PROVISION

## MAUI, LANAI, and MOLOKAI DIVISIONS

the extent that such errors are identified 15 days prior to the Annual implementation date specified in the RAM Provision.

Monthly Allocation Factors for the Target Revenue are as follows:

January	8.24%
February	7.41%
March	8.24%
April	7.89%
May	8.39%
June	8.49%
July	8.90%
August	9.04%
September	8.41%
October	8.72%
November	8.17%
December	8.10%
Total	100.00%

These factors are based on the mWh sales forecast that is approved by the Commission in MECO's test year 2010 rate case and shall be updated in any subsequent test year rate case.

### C: BALANCING ACCOUNT ENTRIES:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

Interest will be recorded monthly to the RBA by multiplying the simple average of the beginning and ending month balance in the RBA times the Interest Rate divided by 12. The Interest Rate shall be 6 percent.

### D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

At the Annual Evaluation Date provided in the Rate Adjustment Mechanism Provision, the Company will file with the Commission a statement of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations. Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits or Baseline Capital Projects Credits, and the RAM Revenue Adjustment will be

MAUI ELECTRIC COMPANY, LTD.

SHEET NO. \_\_\_\_\_  
 Effective \_\_\_\_\_

# REVENUE BALANCING ACCOUNT ("RBA") PROVISION

## MAUI, LANAI, and MOLOKAI DIVISIONS

recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the current calendar year to May 31 of the succeeding calendar year.

### E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT:

The RBA rate adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes. The RBA rate adjustment is calculated based on the Company's forecast of mWh sales over the RBA rate adjustment recovery period.

Effective June 1, 2011 to May 31, 2012

### RBA Rate Adjustment

All Rate Schedules .....	¢/kWh
--------------------------	-------

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM PROVISION  
Maui, Lanai, and Molokai Divisions

**Rate Adjustment Mechanism ("RAM") Provision**

Purpose

This mechanism is subject to review and continuation, termination or modification in the utility's next base rate case proceeding, upon a showing by the utility and finding by the Commission that continuation or modification is appropriate. As part of its submitted testimony in the base rate case, the Company will include a summary report on the status of certain HCEI initiatives. The RAM mechanism is designed to determine the change in annual utility base revenue levels, on a consolidated basis across all MECO divisions, recognizing certain estimated changes in the utility's cost to provide service. If, through the application of this mechanism, it is determined that annual utility base revenues should be decreased or increased, then the RAM Revenue Adjustment will be applied within the Revenue Balancing Account Provision. The RAM Revenue Adjustment established for RAM Period calendar year that is also a rate case test year shall remain in effect until the Commission approves a base revenue level in the Company's test year rate application.

Definitions

- a) The **Annual Evaluation Date** shall be the Date the Company will make its annual filing under this mechanism. The Annual Evaluation Date shall be no later than March 31st of each year, commencing March 31, 2011.
- b) The **Evaluation Period** is defined as the historical twelve month period ending December 31, of each calendar year preceding the Annual Evaluation Date. The Evaluation Period is used solely to determine achieved earnings and any sharing of such earnings above the Authorized Return on Equity.
- c) The **RAM Period** is defined as the calendar year containing the Annual Evaluation Date.

MAUI ELECTRIC COMPANY, LTD.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM PROVISION  
Maui, Lanai, and Molokai Divisions

d) The **Labor Cost Escalation Rate** shall be the applicable annual percentage general wage rate increase provided for in currently effective union labor agreements for use in escalating wage and salary Base Expenses for both union and non-union employees to determine the RAM Revenue Adjustment for each RAM Period. In the event no union labor agreement exists for a RAM Period, the most recently effective annual general percentage increase rate shall apply.

e) The **Non-labor Cost Escalation Rate** shall be the consensus estimated annual change in the Gross Domestic Product Price Indicator ("GDPPI") to escalate non-labor Base Expenses to determine the RAM Revenue Adjustment for each RAM Period. The GDPPI escalation rate shall be the consensus projection published by the Blue Chip Economic Indicators (Aspen Publishing) each February for the current Rate Adjustment Period. In the event that the Blue Chip Economic Indicators forecast of the GDPPI is not available, the Consumer Advocate, Company, and other parties to the most recent rate case, with approval of the Commission, shall jointly select an alternative data source, or national economic index similar to GDPPI, as appropriate.

f) The annual **Labor Productivity Offset** shall be fixed at 0.76 percent (76/100 of one percent) and will be subtracted from the Labor Cost Escalation Rates applicable to Base Expenses to determine the authorized RAM Revenue Adjustment for each RAM Period.

g) The **Base Expenses** shall be the labor and non-labor operations and maintenance expense amounts approved by the Commission in the most recently completed rate case where the test year was the Evaluation Period, or alternatively as approved by the Commission for the immediately preceding year Rate Adjustment Mechanism results if the Evaluation Period was not a test year. Base Expenses shall not include any fuel, purchased power, IRP/DSM, pension, Other Post Employment Benefits ("OPEB"), or Clean Energy/Renewable Energy Infrastructure costs that are subject to recovery through separate rate tracking mechanisms.

MAUI ELECTRIC COMPANY, LTD.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM PROVISION  
Maui, Lanai, and Molokai Divisions

- h) The **Major Capital Projects** shall be those capital investment projects that require application and Commission approval under the Commission's General Order No. 7, but excluding those projects included in the Clean Energy Infrastructure Surcharge.
- i) The **Baseline Capital Projects** shall be the total amounts of capital investment completed and closed to Plant in Service, excluding amounts related to Major Capital Projects.
- j) The **Return on Investment** shall be the overall weighted percentage rate of return on debt and equity capital approved by the Commission in the most recently completed rate case.
- k) The **Authorized Return on Equity** shall be the overall weighted percentage rate of return on equity capital approved by the Commission in the most recently completed rate case.
- l) The **Exogenous Tax Changes** shall be the changes in tax laws or regulations that are estimated to impact Authorized Base Rate Revenues by five hundred thousand dollars (\$500,000) or more.
- m) The **Rate Base** shall be the average net investment estimated for the RAM Period, including each of the elements of rate base reflected within the most recent rate case Decision & Order issued by the Commission, quantified in the manner prescribed in part (f) of Section 2 of the Rate Adjustment Mechanism.
- n) The **Authorized Base Revenue** shall be the annual amount of revenue required for the utility to recover its estimated Operations & Maintenance, Depreciation, Amortization and Tax expenses for the RAM Period, as well as the Return on Investment on projected Rate Base for the RAM Period, using the ratemaking conventions and calculations reflected within the most recent rate case Decision & Order issued by the Commission, quantified in the manner prescribed herein.
- o) The **RAM Revenue Adjustment** shall be the difference between the calculated Authorized Base Revenue for the RAM Period and either: 1) the previous year's calculated Authorized Base

MAUI ELECTRIC COMPANY, LTD.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM PROVISION  
Maui, Lanai, and Molokai Divisions

Revenue; or 2) the revenue requirement approved by the Commission in an interim or final decision in the Company's general rate case, whichever is more recent. The RAM Revenue Adjustment determined by this RAM Provision is to be recovered through the RBA Provision commencing on June 1 and over the subsequent 12 months after June 1.

p) **Earnings Sharing Revenue Credits** shall be the amounts to be returned to customers as credits through the Revenue Balancing Account ("RBA") Provision, so as to implement the earnings sharing percentages and procedures described herein, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

q) **Major Capital Projects Credits** shall be the amounts to be returned to customers through the Revenue Balancing Account Provision, to reduce the preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific major capital projects that were not placed into service within the first nine months of the preceding RAM Period as expected. Because the Commission's review of the Major Capital Projects' actual costs incurred may not occur until the rate case after the RAM Revenue Adjustment for these Major Capital Projects is collected, Major Capital Projects Credits (including interest) will be returned to customers for the amount of Major Capital Projects costs that the Commission disallows for cost recovery. The Major Capital Projects Credits are to be refunded through the RBA Provision, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

r) **Baseline Capital Projects Credits** shall be the amounts to be returned to customers through the RBA Provision, to reduce the preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific baseline capital projects that are disallowed by the Commission in a subsequent rate case if the disallowance reduces actual Baseline Capital Projects costs below the Baseline Capital Projects cost estimate derived using the method identified in part (f)ii. of Section 2 of the Rate Adjustment Mechanism below. Because the

MAUI ELECTRIC COMPANY, LTD.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM PROVISION  
Maui, Lanai, and Molokai Divisions

Commission's review of baseline capital projects may not occur until the rate case after such baseline capital projects are included in one or more RAM Revenue Adjustment filings, Baseline Capital Projects Credits shall be used to refund to customers any prior collections (i.e., Return on Investment on Rate Base and Depreciation, plus interest) relating to the amount of Baseline Capital Projects costs that the Commission subsequently disallows for cost recovery. The Baseline Capital Projects Credits are to be refunded through the RBA Provision, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

**Rate Adjustment Mechanism**

The Company shall file with the Commission, the Consumer Advocate and each party to the Company's most recent rate case proceeding, the schedules specified below:

Evaluation Period Earnings Sharing:

1. For the twelve month period ending December 31, of each year (the "Evaluation Period"), with the filing to be made no later than March 31, of the year following the conclusion of the Evaluation Period. The schedules will include the following:
  - a) Company's recorded actual average net plant in service, accumulated deferred income taxes, inventory, working capital, and other rate base components. The schedules shall also show the utility's depreciation expense, operating and maintenance expense, income taxes, taxes other than income taxes, and other components of income for return, revenues, and capital structure, cost of debt, overall cost of capital, and return on common equity in the format set forth in the final order establishing the Company's latest effective rates.

MAUI ELECTRIC COMPANY, LTD.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM PROVISION  
Maui, Lanai, and Molokai Divisions

- b) All applicable accounting and pro forma adjustments historically required in annual reports filed with the Commission.
- c) Pro-forma adjustments to remove from recorded revenues any out-of-period Earnings Sharing Revenue Credits or Major Capital Projects Credits recorded during the Evaluation Period, and
- d) A calculation comparing the achieved return on average common equity to the following earnings sharing grid, and indicating the Earnings Sharing Revenue Credit that should be recorded within the Revenue Balancing Account to effect the prescribed sharing of earnings above authorized levels:

ROE at or below the Authorized ROE	Retained entirely by shareholders - no customer credits
First 100 basis points (one percent) over Authorized ROE	25% share credit to customers
Next 200 basis points (two percent) over Authorized ROE	50% share credit to customers
All ROE exceeding 300 basis points (three percent) over Authorized ROE	90% share credit to customers

RAM Period RAM Revenue Adjustment:

- 2) The Company shall provide additional schedules indicating the following proposed RAM Revenue Adjustment calculations applicable for the RAM Period using the methodology set forth below:

- a) The Base Expenses shall be segregated between labor and non-labor amounts and treated as follows:

MAUI ELECTRIC COMPANY, LTD.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM PROVISION  
Maui, Lanai, and Molokai Divisions

- i. The labor component shall be quantified for the RAM Period by application of the Labor Cost Escalation Rate, reduced to account for the Productivity Offset to labor expenses.
  - ii. The Non-labor components quantified for the RAM Period by application of the Non-labor Escalation Rate.
  - iii. Tracked O&M expenses for fuel, purchased power, pension/OPEBs, IRP/DSM or other rate adjustment provisions are to be carried forward for the RAM Period at the fixed amounts established in the most recent rate case proceeding.
- b) Depreciation and amortization expenses shall be quantified for the RAM Period by application of Commission-approved accrual rates to the actual recorded Plant in Service balances at the end of the Evaluation Period.
- c) The Authorized Base Revenue required for Rate Base shall be determined by multiplying the applicable Return on Investment percentage rate times Rate Base. The Authorized Base Revenue associated with return on investment shall include related income taxes on the equity components of such return. The quantification of Rate Base is specified in greater detail in part (f) of this Section 2.
- d) The Authorized Base Revenue impact of any Exogenous Tax Changes shall be included in the RAM Period calculation of Authorized Base Revenues.
- e) Revenue taxes shall be adjusted to account for the change in parts (a) through (d) of this Section 2.
- f) Rate Base for the RAM Period shall be quantified as follows:
  - i. Plant in Service, Accumulated Depreciation, Accumulated Deferred Income Taxes and Contributions in Aid of Construction ("CIAC") shall be a two-point average of actual recorded balance sheet data at December 31 of the Evaluation Period, plus projected values at December 31 of the RAM Period determined as prescribed in parts (ii) through (v), below.

MAUI ELECTRIC COMPANY, LTD.

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM PROVISION  
Maui, Lanai, and Molokai Divisions

- ii. Plant in Service shall be quantified by adding to the recorded balances at December 31 of the Evaluation Period, the simple average of Baseline Capital Projects plant additions recorded in the immediately preceding five calendar years, plus the estimated cost of completed Major Capital Projects that are anticipated to be in service by September 30 of the RAM Period. The cost of Major Capital Projects shall be limited to the dollar amounts previously approved by the Commission.
- iii. Accumulated Depreciation at December 31 of the RAM Period shall be quantified by increasing the recorded balances at December 31 of the Evaluation Period by the amount set forth in Section 2 part (b) above.
- iv. CIAC shall be quantified by adding to the recorded balance at December 31 of the Evaluation Period an estimate of the net change for the RAM Period. The net change shall be based on a simple average of cash and in-kind CIAC for the immediately preceding five calendar years for programs (i.e., numerous low cost capital projects) plus specific engineering estimates of any contributions for the Major Capital Projects anticipated to be in service by September 30 of the RAM Period.
- v. Accumulated Deferred Income Taxes shall be quantified by adding to the recorded balances at December 31 of the Evaluation Period the estimated tax effect of the depreciation timing difference (i.e., difference between book depreciation and tax depreciation) on the Baseline Capital Projects and Major Capital Projects added to rate base during the RAM Period.
- vi. Working Cash and all other elements of rate base not specifically addressed above shall be fixed at the dollar amount approved by the Commission in the last rate case Decision & Order. These

MAUI ELECTRIC COMPANY, LTD.

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM PROVISION  
Maui, Lanai, and Molokai Divisions

elements of rate base shall be held constant until revised by a Commission Decision & Order in a subsequent general rate case.

Evaluation Procedures

Complete, indexed workpapers and electronic files supporting the RAM Adjustment Schedules shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding, coincident with the date of filing. The Company will be prepared to provide supplemental information as may be requested to ensure adequate review by the Commission, Consumer Advocate or other parties. The Consumer Advocate and the other parties may propose any adjustments determined to be required to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments. As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate or other parties not later than 15 days before the June 1 effective date of the RBA Rate Adjustments described in the RBA Provision tariff, the RBA Rate Adjustments incorporating the RAM Revenue Adjustment shall go into effect on the June 1 effective date and the Commission shall confirm in its monthly Tariff Order the effectiveness of the Company's proposed tariff, so as to achieve the revenue levels approved for both the Evaluation Period and RAM Period.

Notice

Notice of the annual Rate Adjustment Mechanism filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 30 days and by including notification with its billing statements within 60 days after the Company makes its annual filing pursuant to

MAUI ELECTRIC COMPANY, LTD.

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM PROVISION  
Maui, Lanai, and Molokai Divisions

this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues and Earnings sharing credits;
- b) The effect of the proposed RAM Revenue Adjustment on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed RAM Revenue adjustment may be obtained.

MAUI ELECTRIC COMPANY, LTD.

Docket No. .

SHEET NO.  
Effective

## REVENUE BALANCING ACCOUNT ("RBA") PROVISION

## Supplement To:

Schedule R - Residential Service  
Schedule E - Electric Service For Employees  
Schedule G - General Service Non-Demand  
Schedule J - General Service Demand  
Schedule H - Commercial Cooking and Heating Service  
Schedule P - Large Power Service  
Schedule F - Street Light Service  
Schedule U - Time of Use Service  
Schedule SS - Standby Service

All terms and provisions of Schedules R, E, G, J, H, P, F, U, and SS are applicable except that the total base rate charges for each billing period shall be adjusted by the Revenue Balancing Account Rate Adjustments shown below:

## A: PURPOSE:

The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Hawaii Electric Light Company's (HELCO's) target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery of the RAM Revenue Adjustment provided in the Rate Adjustment Mechanism ("RAM") Provision over the subsequent June 1<sup>st</sup> through May 31st period. Tracking of target revenue and recorded adjusted revenue will commence on the effective date of the tariff that implements the Interim Decision and Order in HELCO's 2010 test year rate case, Docket No. 2009-0164.

## B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the most recent Authorized Base Revenue approved by the Public Utilities Commission (PUC), plus or minus the RAM Revenue Adjustment calculated under the RAM Provision, adjusted to remove amounts for applicable revenue taxes. The target revenue will exclude revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause and all revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment for any previous period to the extent that such errors are identified 15 days prior to the Annual implementation date specified in the RAM Provision.

Monthly Allocation Factors for the Target Revenue are as follows:

SHEET NO. \_\_\_\_\_  
Effective \_\_\_\_\_

# REVENUE BALANCING ACCOUNT ("RBA") PROVISION

January	8.30%
February	7.57%
March	8.36%
April	8.00%
May	8.37%
June	8.17%
July	8.64%
August	8.84%
September	8.39%
October	8.60%
November	8.26%
December	8.50%
Total	100.00%

These factors are based on the mWh sales forecast that is approved by the Commission in HELCO's test year 2010 rate case and shall be updated in any subsequent test year rate case.

## C: BALANCING ACCOUNT ENTRIES:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

Interest will be recorded monthly to the RBA by multiplying the simple average of the beginning and ending month balance in the RBA times the Interest Rate divided by 12. The Interest Rate shall be 6 percent.

## D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

At the Annual Evaluation Date provided in the Rate Adjustment Mechanism Provision, the Company will file with the Commission a statement of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations. Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits or Baseline Capital Projects Credits, and the RAM Revenue Adjustment will be recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the current calendar year to May 31 of the succeeding calendar year.

SHEET NO. \_\_\_\_\_  
Effective \_\_\_\_\_

## REVENUE BALANCING ACCOUNT ("RBA") PROVISION

## E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT:

The RBA rate adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes. The RBA rate adjustment is calculated based on the Company's forecast of mWh sales over the RBA rate adjustment recovery period.

Effective June 1, 2011 to May 31, 2012

## RBA Rate Adjustment

All Rate Schedules ..... ¢/kWh

REVISED SHEET NO. \_\_\_\_  
Effective

## RATE ADJUSTMENT MECHANISM PROVISION

### Rate Adjustment Mechanism ("RAM") Provision

#### Purpose

This mechanism is subject to review and continuation, termination or modification in the utility's next base rate case proceeding, upon a showing by the utility and finding by the Commission that continuation or modification is appropriate. As part of its submitted testimony in the base rate case, the Company will include a summary report on the status of certain HCEI initiatives. The RAM mechanism is designed to determine the change in annual utility base revenue levels, recognizing certain estimated changes in the utility's cost to provide service. If, through the application of this mechanism, it is determined that annual utility base revenues should be decreased or increased, then the RAM Revenue Adjustment will be applied within the Revenue Balancing Account Provision. The RAM Revenue Adjustment established for RAM Period calendar year that is also a rate case test year shall remain in effect until the Commission approves a base revenue level in the Company's test year rate application.

#### Definitions

- a) The **Annual Evaluation Date** shall be the Date the Company will make its annual filing under this mechanism. The Annual Evaluation Date shall be no later than March 31st of each year, commencing March 31, 2011.
- b) The **Evaluation Period** is defined as the historical twelve month period ending December 31, of each calendar year preceding the Annual Evaluation Date. The Evaluation Period is used solely to determine achieved earnings and any sharing of such earnings above the Authorized Return on Equity.
- c) The **RAM Period** is defined as the calendar year containing the Annual Evaluation Date.
- d) The **Labor Cost Escalation Rate** shall be the applicable annual percentage general wage rate increase provided for in  
HAWAII ELECTRIC LIGHT COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

#### RATE ADJUSTMENT MECHANISM PROVISION

currently effective union labor agreements for use in escalating wage and salary Base Expenses for both union and non-union employees to determine the RAM Revenue Adjustment for each RAM Period. In the event no union labor agreement exists for a RAM Period, the most recently effective annual general percentage increase rate shall apply.

e) The **Non-labor Cost Escalation Rate** shall be the consensus estimated annual change in the Gross Domestic Product Price Indicator ("GDPPI") to escalate non-labor Base Expenses to determine the RAM Revenue Adjustment for each RAM Period. The GDPPI escalation rate shall be the consensus projection published by the Blue Chip Economic Indicators (Aspen Publishing) each February for the current Rate Adjustment Period. In the event that the Blue Chip Economic Indicators forecast of the GDPPI is not available, the Consumer Advocate, Company, and other parties to the most recent rate case, with approval of the Commission, shall jointly select an alternative data source, or national economic index similar to GDPPI, as appropriate.

f) The annual **Labor Productivity Offset** shall be fixed at 0.76 percent (76/100 of one percent) and will be subtracted from the Labor Cost Escalation Rates applicable to Base Expenses to determine the authorized RAM Revenue Adjustment for each RAM Period.

g) The **Base Expenses** shall be the labor and non-labor operations and maintenance expense amounts approved by the Commission in the most recently completed rate case where the test year was the Evaluation Period, or alternatively as approved by the Commission for the immediately preceding year Rate Adjustment Mechanism results if the Evaluation Period was not a test year. Base Expenses shall not include any fuel, purchased power, IRP/DSM, pension, Other Post Employment Benefits ("OPEB"), or Clean Energy/Renewable Energy Infrastructure costs that are subject to recovery through separate rate tracking mechanisms.

h) The **Major Capital Projects** shall be those capital investment projects that require application and Commission

HAWAII ELECTRIC LIGHT COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

#### RATE ADJUSTMENT MECHANISM PROVISION

approval under the Commission's General Order No. 7, but excluding those projects included in the Clean Energy Infrastructure Surcharge.

i) The **Baseline Capital Projects** shall be the total amounts of capital investment completed and closed to Plant in Service, excluding amounts related to Major Capital Projects.

j) The **Return on Investment** shall be the overall weighted percentage rate of return on debt and equity capital approved by the Commission in the most recently completed rate case.

k) The **Authorized Return on Equity** shall be the overall weighted percentage rate of return on equity capital approved by the Commission in the most recently completed rate case.

l) The **Exogenous Tax Changes** shall be the changes in tax laws or regulations that are estimated to impact Authorized Base Rate Revenues by five hundred thousand dollars (\$500,000) or more.

m) The **Rate Base** shall be the average net investment estimated for the RAM Period, including each of the elements of rate base reflected within the most recent rate case Decision & Order issued by the Commission, quantified in the manner prescribed in part (f) of Section 2 of the Rate Adjustment Mechanism.

n) The **Authorized Base Revenue** shall be the annual amount of revenue required for the utility to recover its estimated Operations & Maintenance, Depreciation, Amortization and Tax expenses for the RAM Period, as well as the Return on Investment on projected Rate Base for the RAM Period, using the ratemaking conventions and calculations reflected within the most recent rate case Decision & Order issued by the Commission, quantified in the manner prescribed herein.

o) The **RAM Revenue Adjustment** shall be the difference between the calculated Authorized Base Revenue for the RAM Period and either: 1) the previous year's calculated Authorized Base Revenue; or 2) the revenue requirement approved by the Commission in an interim or final decision in the Company's general rate case, whichever is more recent. The RAM Revenue

HAWAII ELECTRIC LIGHT COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

#### RATE ADJUSTMENT MECHANISM PROVISION

Adjustment determined by this RAM Provision is to be recovered through the RBA Provision commencing on June 1 and over the subsequent 12 months after June 1.

p) **Earnings Sharing Revenue Credits** shall be the amounts to be returned to customers as credits through the Revenue Balancing Account ("RBA") Provision, so as to implement the earnings sharing percentages and procedures described herein, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

q) **Major Capital Projects Credits** shall be the amounts to be returned to customers through the Revenue Balancing Account Provision, to reduce the preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific major capital projects that were not placed into service within the first nine months of the preceding RAM Period as expected. Because the Commission's review of the Major Capital Projects' actual costs incurred may not occur until the rate case after the RAM Revenue Adjustment for these Major Capital Projects is collected, Major Capital Projects Credits (including interest) will be returned to customers for the amount of Major Capital Projects costs that the Commission disallows for cost recovery. The Major Capital Projects Credits are to be refunded through the RBA Provision, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

r) **Baseline Capital Projects Credits** shall be the amounts to be returned to customers through the RBA Provision, to reduce the preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific baseline capital projects that are disallowed by the Commission in a subsequent rate case if the disallowance reduces actual Baseline Capital Projects costs below the Baseline Capital Projects cost estimate derived using the method identified in part (f)ii. of Section 2 of the Rate Adjustment Mechanism below. Because the Commission's review of baseline capital projects may not occur until the rate case after such baseline capital projects are included in one or more RAM Revenue Adjustment filings, Baseline Capital Projects Credits shall be used to refund to customers

HAWAII ELECTRIC LIGHT COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

#### RATE ADJUSTMENT MECHANISM PROVISION

any prior collections (i.e., Return on Investment on Rate Base and Depreciation, plus interest) relating to the amount of Baseline Capital Projects costs that the Commission subsequently disallows for cost recovery. The Baseline Capital Projects Credits are to be refunded through the RBA Provision, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

#### Rate Adjustment Mechanism

The Company shall file with the Commission, the Consumer Advocate and each party to the Company's most recent rate case proceeding, the schedules specified below:

Evaluation Period Earnings Sharing:

1. For the twelve month period ending December 31, of each year (the "Evaluation Period"), with the filing to be made no later than March 31, of the year following the conclusion of the Evaluation Period. The schedules will include the following:
  - a) Company's recorded actual average net plant in service, accumulated deferred income taxes, inventory, working capital, and other rate base components. The schedules shall also show the utility's depreciation expense, operating and maintenance expense, income taxes, taxes other than income taxes, and other components of income for return, revenues, and capital structure, cost of debt, overall cost of capital, and return on common equity in the format set forth in the final order establishing the Company's latest effective rates.
  - b) All applicable accounting and pro forma adjustments historically required in annual reports filed with the Commission.
  - c) Pro-forma adjustments to remove from recorded revenues any out-of-period Earnings Sharing Revenue Credits or

HAWAII ELECTRIC LIGHT COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

### RATE ADJUSTMENT MECHANISM PROVISION

Major Capital Projects Credits recorded during the Evaluation Period, and

- d) A calculation comparing the achieved return on average common equity to the following earnings sharing grid, and indicating the Earnings Sharing Revenue Credit that should be recorded within the Revenue Balancing Account to effect the prescribed sharing of earnings above authorized levels:

ROE at or below the Authorized ROE	Retained entirely by shareholders - no customer credits
First 100 basis points (one percent) over Authorized ROE	25% share credit to customers
Next 200 basis points (two percent) over Authorized ROE	50% share credit to customers
All ROE exceeding 300 basis points (three percent) over Authorized ROE	90% share credit to customers

RAM Period RAM Revenue Adjustment:

- 2) The Company shall provide additional schedules indicating the following proposed RAM Revenue Adjustment calculations applicable for the RAM Period using the methodology set forth below:
- a) The Base Expenses shall be segregated between labor and non-labor amounts and treated as follows:
- i. The labor component shall be quantified for the RAM Period by application of the Labor Cost Escalation Rate, reduced to account for the Productivity Offset to labor expenses.
  - ii. The Non-labor components quantified for the RAM Period by application of the Non-labor Escalation Rate.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

## RATE ADJUSTMENT MECHANISM PROVISION

- iii. Tracked O&M expenses for fuel, purchased power, pension/OPEBs, IRP/DSM or other rate adjustment provisions are to be carried forward for the RAM Period at the fixed amounts established in the most recent rate case proceeding.
- b) Depreciation and amortization expenses shall be quantified for the RAM Period by application of Commission-approved accrual rates to the actual recorded Plant in Service balances at the end of the Evaluation Period.
- c) The Authorized Base Revenue required for Rate Base shall be determined by multiplying the applicable Return on Investment percentage rate times Rate Base. The Authorized Base Revenue associated with return on investment shall include related income taxes on the equity components of such return. The quantification of Rate Base is specified in greater detail in part (f) of this Section 2.
- d) The Authorized Base Revenue impact of any Exogenous Tax Changes shall be included in the RAM Period calculation of Authorized Base Revenues.
- e) Revenue taxes shall be adjusted to account for the change in parts (a) through (d) of this Section 2.
- f) Rate Base for the RAM Period shall be quantified as follows:
  - i. Plant in Service, Accumulated Depreciation, Accumulated Deferred Income Taxes and Contributions in Aid of Construction ("CIAC") shall be a two-point average of actual recorded balance sheet data at December 31 of the Evaluation Period, plus projected values at December 31 of the RAM Period determined as prescribed in parts (ii) through (v), below.
  - ii. Plant in Service shall be quantified by adding to the recorded balances at December 31 of the Evaluation Period, the simple average of Baseline Capital Projects plant additions recorded in the immediately preceding five calendar years, plus the estimated cost of completed Major Capital Projects that are anticipated to be in service by September 30 of the RAM Period. The cost of

HAWAII ELECTRIC LIGHT COMPANY, INC.

REVISED SHEET NO. \_\_\_\_  
Effective

## RATE ADJUSTMENT MECHANISM PROVISION

Major Capital Projects shall be limited to the dollar amounts previously approved by the Commission.

- iii. Accumulated Depreciation at December 31 of the RAM Period shall be quantified by increasing the recorded balances at December 31 of the Evaluation Period by the amount set forth in Section 2 part (b) above.
- iv. CIAC shall be quantified by adding to the recorded balance at December 31 of the Evaluation Period an estimate of the net change for the RAM Period. The net change shall be based on a simple average of cash and in-kind CIAC for the immediately preceding five calendar years for programs (i.e., numerous low cost capital projects) plus specific engineering estimates of any contributions for the Major Capital Projects anticipated to be in service by September 30 of the RAM Period.
- v. Accumulated Deferred Income Taxes shall be quantified by adding to the recorded balances at December 31 of the Evaluation Period the estimated tax effect of the depreciation timing difference (i.e., difference between book depreciation and tax depreciation) on the Baseline Capital Projects and Major Capital Projects added to rate base during the RAM Period.
- vi. Working Cash and all other elements of rate base not specifically addressed above shall be fixed at the dollar amount approved by the Commission in the last rate case Decision & Order. These elements of rate base shall be held constant until revised by a Commission Decision & Order in a subsequent general rate case.

HAWAII ELECTRIC LIGHT COMPANY, INC.

REVISED SHEET NO. \_\_\_\_  
Effective

## RATE ADJUSTMENT MECHANISM PROVISION

### Evaluation Procedures

Complete, indexed workpapers and electronic files supporting the RAM Adjustment Schedules shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding, coincident with the date of filing. The Company will be prepared to provide supplemental information as may be requested to ensure adequate review by the Commission, Consumer Advocate or other parties. The Consumer Advocate and the other parties may propose any adjustments determined to be required to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments. As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate or other parties not later than 15 days before the June 1 effective date of the RBA Rate Adjustments described in the RBA Provision tariff, the RBA Rate Adjustments incorporating the RAM Revenue Adjustment shall go into effect on the June 1 effective date and the Commission shall confirm in its monthly Tariff Order the effectiveness of the Company's proposed tariff, so as to achieve the revenue levels approved for both the Evaluation Period and RAM Period.

### Notice

Notice of the annual Rate Adjustment Mechanism filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 30 days and by including notification with its billing statements within 60 days after the Company makes its annual filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues and Earnings sharing credits;

HAWAII ELECTRIC LIGHT COMPANY, INC.

Docket No. .

REVISED SHEET NO. \_\_\_\_  
Effective

RATE ADJUSTMENT MECHANISM PROVISION

- b) The effect of the proposed RAM Revenue Adjustment on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed RAM Revenue adjustment may be obtained.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Docket No. .

Decoupling Docket (Docket No. 2008-0274)  
ECAC Deadband Proposal

## A. Background

In its Opening Statement of Position in this Decoupling docket, Haiku Design and Analysis (“HDA”) proposed, among other things:

- (7) Convert the existing ECAC to a straight full cost pass through for fuel and purchased energy expenses.<sup>1</sup>

HDA also stated, among other things<sup>2</sup>:

HDA argues here, for purposes of consideration by the Commission and other parties, that it is time to retire the ECAC mechanism and replace it with a straight full cost pass through. HDA offers the following arguments:

- (a) A straight cost pass through would considerably simplify administration of the fuel adjustments and the decoupling mechanisms. First, it is very simple compared to the existing ECAC. Second, it would simplify the administration of a decoupling mechanism. In fact, if there is going to be a revenue balancing account (RBA) for the decoupling mechanism, implementing a straight pass through could be done as part of the same set of calculations, adjustments and reconciliations. One set of lines in the RBA would match and adjust collected revenues for fixed costs to target revenues for fixed costs (the HECO proposed decoupling method). A second set of lines would match and adjust collected revenues for fuel and purchased energy to actual fuel and purchased energy expenses (a straight full cost pass through).
- (b) A straight pass through is consistent with the objectives of the RAM generally: reduction of risk and uncertainty in full recovery of utility expenses.
- (c) The existing ECAC incentives to the utility to operate its system efficiently from a thermodynamic standpoint (to minimize system heat rate) provides some convoluted incentives regarding commitment of purchased power generation units versus commitment of company generation units.<sup>3</sup> With substantial amounts of new renewable generation being added to the utility system, a straight fuel cost pass through would “decouple” utility earnings from resource commitment (and curtailment) decisions. The utility should not be at financial risk based on resource commitment and curtailment decisions that should be made according to policies (maximization of renewable generation) that

---

<sup>1</sup> HDA’s Opening Statement of Position, dated March 28, 2009, page 7, Item (7).

<sup>2</sup> Ibid., pages 7 to 9.

<sup>3</sup> Commitment refers to the decisions made by a utility dispatcher to start generation units or take units off-line in order to maintain sufficient operating generation units to meet instant generation requirements.

EXHIBIT C  
ATTACHMENT 7  
PAGE 2 OF 6

conflict with the most efficient thermodynamic operation of the utilities' own generation units.

- (d) Similarly, the existing ECAC provides an incentive for the utilities to minimize spinning operation reserve capacity and, in effect, penalizes utility earnings for providing additional operation reserve capacity. This is significant because maximizing the incorporation of intermittent renewable resources requires providing increased operating reserve capacity. The utilities should not be financially penalized for providing ample operation reserves in order to accommodate intermittent renewable generation. A straight fuel cost pass through would decouple utility earnings from operation reserve capacity decisions.
- (e) Since the HECO Companies currently dispatch generation resources using AGC controls that are based on minimizing economic costs, regulators have a simple verifiable way to determine that resources are being operated economically. The efficiency incentive in the existing ECAC is not necessary to ensure economic dispatch of system resources.<sup>4</sup>

In Exhibit D to the Joint Final Statement of Position of the HECO Companies and Consumer Advocate, filed May 11, 2009, the HECO Companies agreed with "HDA that the fixed heat rate could result in the utilities recovering more or less than their fixed costs under sales decoupling, and that the fixed heat rate may incent the utilities to take less renewable energy under certain circumstances. The system heat rate worsens because utility generators must often be taken off of economic dispatch to accommodate increased levels of renewable energy."

The HECO Companies and the Consumer Advocate jointly proposed that a 50 Btu/kWh-sales deadband be established above and below each of the fixed sales heat rates by fuel-type in HECO's ECAC, and explained the basis for the proposal in Exhibit D. Should the Commission issue a final Decision and Order (D&O) in HECO's 2009 test year rate proceeding prior to a final D&O in the instant docket, the application of the deadband in HECO's ECAC would take effect upon the issuance of a final D&O by the Commission in the instant docket.. Should the Commission issue a final D&O in the instant docket prior to a final D&O in HECO's 2009 test year rate case, the ECAC deadbands would be implemented upon the effective date of the final HECO 2009 test year rate case D&O.

In Exhibit D, the HECO Companies and the Consumer Advocate noted that: "The concept of sales heat rate deadbands by fuel type also applies to HELCO and MECO. However, more analyses will be conducted by the Companies to determine the appropriate deadband widths for each company."

---

<sup>4</sup> Note that the utilities actually do not really dispatch resources directly according to ECAC revenue maximization in any case since resources are dispatched based on minimizing fuel expense, not based on minimizing BTU consumption.

EXHIBIT C  
ATTACHMENT 7  
PAGE 3 OF 6

B. HECO Proposal for HELCO and MECO sales heat rate deadbands

As noted above, the explanation for the HECO sales heat rate deadband was based on an assumption of the possible impact of decoupling to be equivalent to a 5% reduction in sales and assuming that the relationship between the change in sales and the change in efficiency factor is linear. This resulted in a deadband width of  $\pm 50$  Btu/kWh-sales above and below the test year sales heat rate, which represents less than 1% of the system sales heat rate for HECO.

The relatively small deadband for HECO of  $\pm 50$  Btu/kWh-sales takes into account the size of the HECO system (relative to those of MECO and HELCO), and the size of the Independent Power Producer (“IPP”) facilities expected to be added prior to the resetting of HECO’s rate case heat rate target in its next rate case, which is expected to use a 2011 test year.

1. For MECO – Maui Division, the deadband width shall be  $\pm 100$  Btu/kWh-sales. The  $\pm 100$  Btu/kWh-sales deadbands do not accommodate the impact of larger IPP additions on Maui. The proposed deadband is based on production simulation runs that indicate that MECO’s diesel system heat rate could increase by 61 Btu/kWh-net based on a decrease in sales by 5%, and could decrease by 45 Btu/kWh-net based on an increase in sales by 5%. This deadband would apply to both fuel types (Industrial Fuel Oil and diesel fuel) used by the Maui Division. The  $\pm 100$  Btu/kWh-sales deadbands are also intended to accommodate small IPP additions (such as photovoltaic additions sized below the competitive bidding threshold), as well as sales changes.
2. For MECO – Lanai and Molokai Divisions, the Consumer Advocate and the Companies agree to a deadband width of  $\pm 50$  Btu/kWh-sales, consistent with the width selected for HECO. Lanai and Molokai Division use only one fuel type – diesel fuel.
3. For HELCO, the deadband width shall be  $\pm 100$  Btu/kWh-sales, consistent with the deadband width proposed for MECO – Maui Division. This deadband would apply to both fuel types (Industrial Fuel Oil and diesel fuel) used by HELCO. The proposed  $\pm 100$  Btu/kWh-sales deadbands are intended to accommodate small IPP additions (such as photovoltaic additions sized below the competitive bidding threshold), as well as sales changes. The  $\pm 100$  Btu/kWh-sales deadbands do not accommodate the impact of larger IPP additions on the Big Island.

C. Redetermination of Sales Heat Rate Proposal

Based on production simulation runs for scenarios where additional increments of renewable energy generation are integrated into the grids, HECO anticipates that changes in any of the utilities’ heat rates could exceed the bounds of the deadbands described in Part B above. For example, using a production simulation model, HECO projected that Maui Division’s diesel system heat rate could increase by 282 Btu/kWh-net if a 21 MW

EXHIBIT C  
ATTACHMENT 7  
PAGE 4 OF 6

windfarm is added to the Maui system and an additional 10.5 MW of regulating reserve is carried (over and above the existing 15 MW average amount of regulating reserve already carried).

In recognition of these potential occurrences, the Consumer Advocate proposed the following:

Any new resources that require PPA approval by the PUC can trigger redetermination of system heat rates and/or bands outside of rate cases, based upon the characteristics of the project and contractual terms of operation, by revision to the test year simulation model most recently used to establish heat rates/bands.

The HECO Companies agree with the Consumer Advocate's proposal in concept and propose the following in an effort to specify the circumstances under which the redetermination of the sales heat rates would be undertaken in the future.

1. Triggers for Redetermination of Target Heat Rate
  - a. Non-utility firm or non-utility non-firm renewable resources (such as wind or photovoltaics) from which the utility will purchase capacity and/or energy under a Power Purchase Agreement that exceed the threshold noted below may trigger a redetermination of the target heat rate. For HECO, the proposed threshold size of resource is 20 MW. For MECO – Maui Division and HELCO, the proposed threshold size of resource is 5 MW. For MECO – Lanai and Molokai Divisions, the proposed threshold size of resource is 500 kW.
  - b. Utility firm and non-firm renewable resources (such as wind or photovoltaics) may also trigger a redetermination of the target heat rate. The proposed size thresholds would be the same as in paragraph C.1.a. above.
  - c. The target heat rate set for HECO in its 2009 test year rate case and the target heat rates to be set in the upcoming 2010 test year rate cases for MECO and HELCO should be subject to adjustment if additions, retirements or modifications to their generating systems, or modifications to their generating system operating procedures, are expected to increase or decrease the target heat rates by more than the deadband amounts.
2. Timing for Seeking Changes in the Heat Rate Target
  - a. The utility may seek a change in the target heat rate in a traditional rate case, as it currently does, when a resource will be added in a rate case test year.
  - b. The utility may also seek a change in the target heat rate when resources identified in Section C.1. above will be added to the grid outside of a rate case test year.
3. Process for Utility to Seek a Change to the Heat Rate Target Outside of a Rate Case

EXHIBIT C  
ATTACHMENT 7  
PAGE 5 OF 6

- a. In the case of a utility-built firm and non-firm resource, the utility may file a request to change the heat rate target as part of the application for approval to expend funds (in accordance with General Order No. 7) for the resource that would cause the change in heat rate.
- b. If the utility anticipates that one of the triggers for redetermination of the heat rate target (as identified in Section C.1. above) will occur after a rate case test year, the utility should include in its rate case docket a proposal to change the heat rate target at some future time. The proposal to change the heat rate target outside of a test year should be evaluated as part of the rate case docket. The proposed change to the heat rate target should take effect when the addition, retirement or modification is made.
- c. The proposal to change the heat rate target outside of a test year should also be reflected in the submittal of the new production simulation for short-run avoided energy costs in Docket No. 7310.

In Decision and Order No. 24086, filed March 11, 2008, Docket No. 7310, Avoided Costs Investigation, the Commission approved the Updated Stipulation of the parties establishing a new methodology for the calculation of short-run avoided energy costs for HECO, HELCO and MECO (the “HECO Companies”) using the Qualifying Facility (“QF”) in /QF out production simulation methodology. Pursuant to the Updated Stipulation, the HECO Companies redo and issue the production simulation results on an annual basis, with updates during the year if certain triggers occur. The model includes any changes anticipated in the amount of firm capacity available. Capacity additions (retirements) are included in the simulation on the date of the scheduled addition (retirement).<sup>5</sup> The data provided with each update includes the calibrated input data set, and the modeling assumptions used in the production costing model, as updated to reflect any changes in the actual operating conditions

#### 4. Justification to Change Heat Rate Target

- a. In its request to change the target heat rate, the utility would need to show that a change in the heat rate target is warranted by production simulation results with and without the proposed resource and the change in heat rate caused by the addition of the resource.
- b. Where the change in the heat rate is caused at least in part by an increase in regulating reserve, the utility would need to show that carrying the additional regulating reserve is warranted to maintain system reliability.

---

<sup>5</sup> For example, a monthly change of more than 5% from the anticipated level of available firm capacity resources (due, for example, to an extended forced outage) if known one month prior to the beginning of that month, will require the re-execution of the production simulation for that month.

5. Effective Date of Change in Target Heat Rate

- a. The change in the target heat rate would be effective after (1) the Commission approves the change via the appropriate docket (see Section C.3. above) and (2) immediately after the resource is placed into service, or when the addition, retirement or modification is made.
- b. The heat rate targets may be reset in future rate cases at the time of any interim rate increase.

6. Application of the Deadbands

- a. For HECO, the initial deadband levels shall be applied around the target heat rates that would be effective upon the issuance of a final decision and order in the 2009 Test Year rate case if the Commission approves the deadband levels in a final decision and order in the instant docket prior to issuing a final decision and order in the 2009 Test Year rate case. If the Commission has already issued a final decision and order in the 2009 Test Year rate case, the application of the deadband in HECO's ECAC would take effect upon approval by the Commission in the instant docket.
- b. For MECO and HELCO, the initial deadband levels shall be applied around their respective target heat rates beginning with the issuance of the interim decision and orders in their respective next (2010) test year rate case, if the heat rate targets are changed from their current values in those decision and orders (see 5.b. above). If the heat rate targets are not changed in the MECO and HELCO Companies' respective interim decisions and orders, the deadbands will be applied beginning with the Commission's issuance of the final decision and orders in their respective 2010 test year rate cases.
- b. Once the revised target heat rates are in effect, the deadband levels described in Sections B.2 to B.5 above shall apply around the revised target heat rate.

7. Changes to the Deadband Levels

Changes to the deadbands may be proposed in future rate cases (i.e., the rate cases after the 2009 test year rate case for HECO, and the 2010 test year rate cases for MECO and HELCO).